

The MARINE CORPS GAZETTE

Captain Frank E. Evans, U. S. Marine Corps, Retired, Editor.

Vol. II

MARCH, 1917

No. 1

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PUBLISHED QUARTERLY BY
THE MARINE CORPS ASSOCIATION

24 EAST 23rd STREET, NEW YORK, N. Y.

ANNUAL SUBSCRIPTION \$1.00

Application for entry as Second-class Mail Matter at the postoffice at Washington, D. C., under the Act of March 3, 1879, pending

The Marine Corps Association

Organized April 25, 1913, at Guantanamo, Cuba

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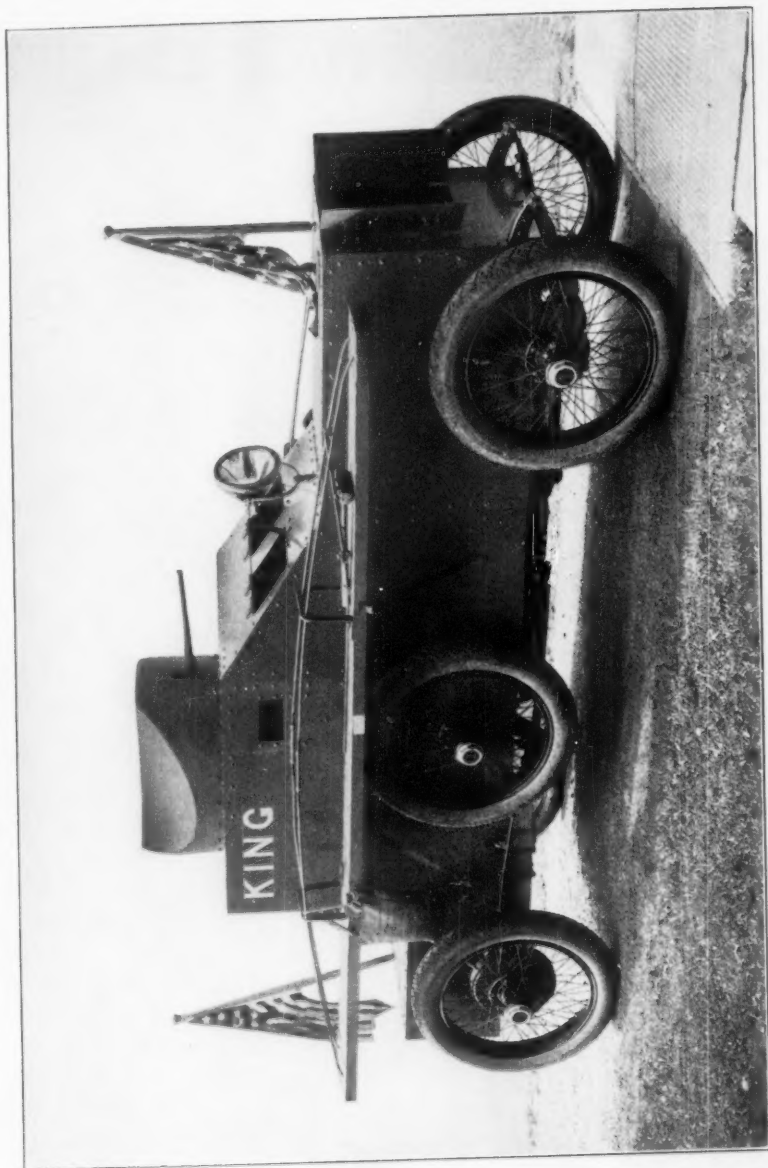
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THE NEW ARMORED CAR.

The Marine Corps Gazette

VOL. II

MARCH, 1917

No. 1

MOTOR TRANSPORTATION IN THE MARINE CORPS

CAPT. FRANK E. EVANS, U. S. MARINE CORPS, RETIRED.

WHEN Congress, at its recent session, authorized the purchase of two armored motor cars for the Marine Corps, at a cost not to exceed \$10,000 for each complete car, the Headquarters of the Corps had already begun its search for the armored car designed for use on expeditionary service. The Jeffery quad trucks in the Haitian and Santo Domingo operations had proved that motor-driven machines were suitable, under favoring conditions, for campaigns in tropical countries. The chief limitations imposed by such service were incidental to the notoriously bad roads and trails found in both those theaters of operation, and heavy rains and trails, impassable except by foot troops, had further narrowed their effective scope. When not confronted by these hampering conditions the trucks had done excellent work and contributed to the success of the expeditionary forces.

The improvisation of armor capable of resisting small-arms fire, and the improvised installation of automatic rifles or machine guns did demonstrate the need of a light armored car that could be used on reconnaissance work in hostile territory and for cooperation with foot troops in many phases of active service. A light car that combined with mobility both defensive armor and an offensive weapon was the goal desired. It is easily conceivable that under favorable conditions of terrain such a car would add to our boasted mobility, while, where the conditions of the road, due to either tropical conditions or the almost unbelievable neglect characteristic of both Haiti and Santo Domingo, either prevent or impede the passage of the car at a rate equal to that of infantry, the mobility of the main offensive unit would be ham-

pered to a point that would either threaten or prevent success. The destruction of a bridge would alone be highly detrimental to the mobility of a column accompanied by armored cars. One feature of the car that was tested, or rather its equipment, is the reenforced trussed steel bridge provided for such a contingency.

If the armored car makes good under the handicaps that it will encounter in either of these countries then its range of possibilities where reasonably good roads are found would appear to be almost unlimited. Its moral effect on untrained forces when it can be used will undoubtedly be of great value.

THE ARMORED CAR TESTS

While it was obviously impossible to duplicate the conditions of terrain and roadway that will be met in either Haiti or Santo Domingo, every effort was made by the board appointed by the Major General Commandant to conduct exhaustive tests of a car of the desired type, to approximate the conditions.

In addition to the requirements of its operation on land were considered its ease of transportation aboard ship; the practicability of its disembarkation where modern wharfage facilities were not available, and the best and most simple method by which it could be, whether under favorable or unfavorable weather conditions, transported from the deck of a man-of-war or transport to the beach in one of the various types of boats carried by such vessels. These considerations naturally complicated the requirements that a car would satisfy where all its operations were restricted to land warfare, introducing the elements of size and weight that must be reckoned with.

The Major General Commandant, to expedite the final acquisition of such a car, detailed Capts. Earl H. Ellis and Andrew B. Drum, of the line, and Capt. Seth Williams, of the Quartermaster's Department as a board to conduct the tests. The final report of the board was made by Captain Drum under date of August 15, 1916, two weeks prior to the final enactment of the Naval Appropriation Bill.

The board first made a preliminary survey of the cars available for its tests and that, on the surface, appeared to conform to the salient characteristics of a practical light armored car. Happily, such a car had proved its worth in the European war and Capt. Waldo A. Ross, who had seen service in the British forces,

had taken up with the Armored Motor Car Company, of Detroit, Mich., the idea of introducing such a car into the American service. Captain Ross had suffered permanent disability while attached to the Royal Flying Corps and arrived in Detroit to look over the field for a motor-car chassis that would be capable of development into a light armored car. He had been attracted to the King car, of that automobile center, by virtue of the satisfactory weight of its chassis and its eight-cylindered motive power.

Following his supervision, a car of the desired type was built and driven overland to Washington for ordnance tests to be held by the Army Ordnance at Fort Myer. These tests attracted immediate interest, and, in addition to prominent government officials, certain attachés of foreign embassies and legations watched the new armored car in its work on the military reservation. Captains Ellis and Williams were present at the demonstration.

Among the tests to which the car was subjected was climbing a short 18 per cent grade over a rough, cobblestoned surface with a full complement in its crew, and over the winding military road on the reservation leading to the old signal storehouse. The pilot of the car drove it up the sandhill leading to the same point over such obstacles as sunken boulders and holes with success, and then came a more gruelling test over the terrain of the Black Ravine where army trucks had invariably come to grief. At the bottom of this ravine the car successfully negotiated a water-filled ditch after a drop of $4\frac{1}{2}$ feet and climbed up to the crest of the opposite bank. In the speed test on the plain the car registered a speed of 45 miles per hour.

TESTS AT LEAGUE ISLAND

Following this test the car was turned over to Captain Ellis and Williams for the trip overland to the League Island Navy Yard. For a period of ten days the full board subjected the car to exhaustive tests, always with its suitability for rough expeditionary work in the foreground. The final report of the board testified to its entire fitness for the work in view. The operation of the motor was pronounced perfect, and, with the exception of minor changes in its details, the board reported to the Major General Commandant that the car was suitable for any service that the Corps might require of it.

To find its adaptability for transportation both by vessel and

by boat the car was hoisted into a 40-foot motor sailing launch and lowered on to 2-inch by 12-inch joists placed fore and aft across the thwarts. The boat was then beached, stern foremost and the car was run ashore on a runway of planks. It was found that this operation could be further perfected by the attachment of hooks to the portable bridges by which it was transferred ashore, the hooks to rest on the boat's stern and the bridges to be made of trussed steel rather than wood. These reenforced bridges can also be made use of in the field to get the car over ditches that it cannot otherwise negotiate by its own power. On the car these trussed steel bridges, two in number, are to be attached by brackets to each side of the corner so that they will answer as fenders, and a small steel seat will be fitted on each rear end. They will be 12 inches wide and 12 feet over all, according to the specifications imposed and capable of sustaining 6,000 pounds, the weight of the car exclusive of personnel and ammunition being designated not to exceed 5,000 pounds. When the hooks of these bridges are placed over the stern of a launch they will clamp over it, being secured to the bridge ends in such a manner as to be easily dismountable.

The car can also be transported ashore in the 36-foot sailing launch. In rough weather the car will be lowered to the bottom of the boat to secure better gravity and shear legs and a multiple block will bring it up to the level of the runway. The car was easily lowered and hoisted by the use of a sling of 6-inch manila hawser, 61 feet long, passing under the axles and fastened to a hook over the car. The advisability of using a wire sling was considered as the breaking strain of the 6-inch circumference hawser—30,000 pounds—is slightly less than the breaking strain of a three-quarter-inch crucible-cast steel hoisting line of the six strands, nineteen wires to a strand, or the five-eighths-inch line of the higher plow steel construction. The manila sling was specified as being standard advance base material that is always available where a crane powerful enough to lift the car might not be obtainable. The sling is not stowed in the car, but it carries a steel towing cable 30 feet long which is capable of towing a 6,000-pound car over rough roads and hills, and in addition a conventional 40-foot steel cable Pull-U-Out for troublesome ditches.

In the tipping test it was found that the car, as designed, could be so lifted by a crane that the two outer wheels were at a height of 30 inches off the ground before it lost its balance, and the

tipping angle reached was 33 degrees. By lowering the entire armored portion and floor about 4 inches an even lower center of gravity will be attained in the perfected car.

THE ARMAMENT

The armament of the car has been recommended to take either the Lewis, Vickers or Benet gun. The Lewis gun was unobtainable and the Benet automatic rifle was mounted in the turret on a ball and socket joint and the gun fired, after a run to Atlantic City, from all positions. The gunner, suspended by a seat on a universal joint, had no difficulty in operating his weapon, manipulating the half-clips with ease. The tests showed that no difficulty would be encountered in mounting a Lewis gun with the use of which Captain Ross, who accompanied the board, was quite familiar. A lock-nut to hold the gun stationary when not in use will be added to the mount.

In the road and field tests held by the board the car experienced no trouble in crossing sand hub-deep, plowed fields and ditches and took a 30-degree hill 200 yards long. While traveling along a stretch of road at the speed of 45 miles per hour it was necessary to turn the car sharply off the road to avoid hitting an innocent bystander. The car turned over completely two and one-half times before stopping and a half hour later was speeding down the road under her own power. The crew, equipped with head guard and pads, suffered nothing more serious than the acrobatic stunt imposed by the somersaulting car.

The turret will be operated either by swinging manual power or through a pinion and rack cut integral with the lower turret base ring. The gun port will permit of vertical train.

The finished car will have armor that may be easily dismounted, leaving the chassis with suitable body to be used as a truck in cases of emergency.

As has been stated before, the present car conformed so closely to the requirements of service that it can be perfected for such service by minor changes. The specifications will give the car a brake and control system, an electrical and cooling system that past experience has dictated for a modern car, so far as those requirements lie. The motor, frame, transmission and steering gear will be of the best possible character and the armored portion will conform to recommendations dictated by the field service that will fall to its lot.

THE BEGINNING OF A SQUADRON

It is hoped to increase the appropriation made available by Congress so that the tactical unit of the armored motor car, with its revolving turret, its protection from rifle fire at close range and its provisions for the personnel and armament will be the squadron of four cars. The cars are destined for use in the West Indies and every effort has been made from the start to make them speedily available for such service. From the report of the board it is to be hoped that the cars will measure up to the inexorably severe test of field service and prove an invaluable reenforcement to the troops now operating. A squadron of aircraft would then be all that is required to make the brigades under the command of Generals Pendleton and Cole as fully equipped with all material as the modern division in the field.

It is worthy of note that the Army is seriously considering the adoption of such a car. When the Marine Corps Board had completed its tests, the Ordnance Department took charge of the armored motor car to supplement the preliminary tests held on the Fort Myer reservation. An official observer of that bureau was detailed to accompany the car overland from New York to the Rock Island Arsenal. The route followed led through Philadelphia, Pittsburgh, Cleveland, Toledo and Chicago. The trip was marked by much interest in the car's mission and attracted considerable publicity.

In addition to the observer detailed by the Ordnance Bureau the American Automobile Association selected official observers for the test, the chief official of that body's technical committee of its contest board being in charge of its representation. After the conclusion of the Rock Island tests the car was driven overland to its starting point, Detroit, and then shipped to Dallas, Tex. In Texas it was placed impartially at the disposal of the recruiting stations of the Marine Corps and the Army, in recognition of the interest shown in its possibilities by both branches of the service, proving a valuable medium in the publicity campaigns waged by both to fill the quotas authorized by the recent Congress.

The photograph showing the King car being transported in the 40-foot motor sailed, which was enlarged by the Publicity Bureau of the Corps as one of its series of the Pictorial Service, has had country-wide circulation and has proved one of the most striking

MOTOR TRANSPORTATION IN MARINE CORPS 7

of the series. Through the cooperation of the advertising department of the Armored Motor Car Company several hundred additional of this number were used to great advantage by its local agencies, and the public was impressed with the fact that the Corps was not only the first of our services to adapt the motor truck to actual field service, but was the pioneer in adopting modern armored motor car, equipped along the lines of the European fighting machine.

The armored cars, barring delay in the purchase of the armor plate required, will be delivered in the current month. In the interim between the time of order and that of final delivery, the manufacturers loaned their demonstrator car to the Corps. Two crews were trained in its use at League Island, and, when final delivery is accomplished, the personnel for two crews will be thoroughly competent to man them.

THE BEGINNINGS OF OUR TRANSPORT

The first motor vehicle purchased by the Marine Corps was in July, 1909, a Studebaker-30, and it was used for the purpose of carrying the mails and for other official military purposes, in Washington, D. C. Since that time, and including the one above mentioned, there have been purchased by the Marine Corps 72 motor vehicles, as follows:

TWO-WHEEL DRIVE

- 4 Studebakers—Passenger.
- 4 Studebakers—Combination passenger and freight.
- 6 Macks—trucks.
- 1 Kelly-Springfield—Truck.
- 2 Packards—Trucks.
- 3 Benzs—Trucks.
- 2 Whites—Trucks.
- 1 Federal—Truck.
- 5 Fords—Combination passenger and freight.
- 8 Fords—Trucks.
- 10 Fords—Passenger.

FOUR-WHEEL DRIVE

- 24 Jeffreys—Trucks.
- 1 Duplex—Truck.

Four of the above-mentioned motor vehicles have been worn out in service, condemned and sold.

During the summer of 1914, the Quartermaster gave consideration to the purchase of a four-wheel drive and steer truck for trial with a view to ascertaining whether or not this style of truck was better adapted for general military use than the two-wheel drive, and in November opened proposals for furnishing the Marine Corps with one of these trucks. In order to make a comparison of the trucks which the bidders proposed to furnish, a test was conducted under the directions of a board formed for that purpose, consisting of Col. Eli K. Cole, Maj. R. H. Dunlap, Maj. H. L. Roosevelt, and Capt. R. O. Underwood.

After an extensive test the board recommended that the Jeffery truck be accepted. This report was referred to the Secretary of the Navy, who, in order to encourage the manufacture of four-wheel-drive trucks, ordered that a Duplex, as well as a Jeffrey, truck be procured and tested.

These two trucks were forwarded to the Marine Barracks, Naval Academy, Annapolis, for use by the artillery battalion and, of the two trucks, the Jeffery was found better adapted for general military purposes in the Marine Corps, in the hauling of supplies and artillery over all kinds of roads and over sandy and broken terrain.

Motor vehicles are practically the only means of transportation which can be used satisfactorily by the Marine Corps, owing to its dual service on land and sea. It is manifestly impossible to carry animals on men-of-war and Marine Corps transports, as it frequently happens that expeditions remain at sea for two or three months before landing. Under such circumstances, even if the animals were still alive when landed, they would afford little service ashore for a couple of months thereafter.

THE QUADS IN HAITI

When the Marines were ordered to Haiti in the summer of 1915, four Jeffery trucks, quads, were sent with them and later five others were forwarded to Haiti. From the official reports received, the Jeffery quads performed very satisfactory service. Excerpts from reports are as follows:

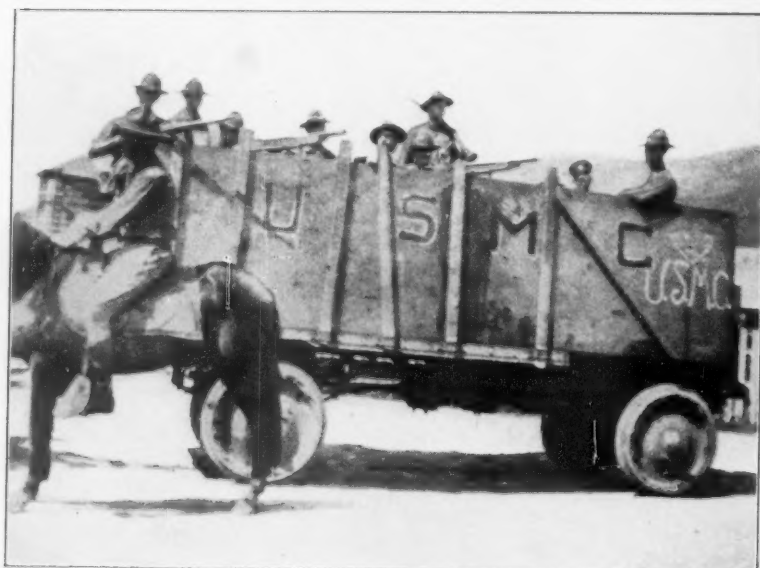
"The Brigade Quartermaster, under date of November 23, 1915, states that two Jeffery quads have been in continuous use in that department since August 16, 1915, and while

THE ARMORED CAR SUSPENDED IN HAWSER SLING



TRANSPORTING ARMORED CAR IN SAILING LAUNCH.

THE TIPPING TEST



TWO-TON QUAD, IMPROVISED AS ARMORED CAR, HAULS TWO FIELD
PIECES AND LOADED CAISSONS FROM CAPE HAITIEN TO QUARTIER
MORIN.

all the traveling performed has been over roads exceedingly rough, very stony and with considerable grade, the trucks performed admirable service and demonstrated their suitability for work of this nature. Under conditions such as exist here, where the organizations are scattered over a considerable area, the question of supply would be a formidable one were it not for the dependability of these trucks. The Brigade Quartermaster further states that a light delivery car of the Ford type was a necessary adjunct to the efficiency of motor transportation in the handling of small shipments which must be made from time to time, and the Ford cars have performed that duty in a most satisfactory manner.

"The Commanding Officer of the Artillery Battalion, on November 13, 1915, in a report to the Brigade Commander, states that the battalion under his command has six Jeffery quads, four of which are at Port-au-Prince, and two at Cape Haitien. The trucks at Port-au-Prince have been in continuous use since the arrival of the artillery battalion, hauling guns and caissons over bad roads in the vicinity of Port-au-Prince, and also hauling and delivering stores and provisions for the brigade as well as for the artillery battalion. The trucks have been found to be satisfactory for the transportation of artillery so far as can be ascertained in the limited time they have been in use.

"The Commanding Officer of the First Company, under date of November 11, 1915, states that in the limited time the quads have been in use in handling guns, caissons, and supplies, etc., over various kinds of roads, they have performed satisfactory service."

When the Marines were ordered to Santo Domingo they carried with them two White motor trucks, two-wheel drive, and in addition to these five Jeffery quads were furnished. Recently, on request of the Commanding Officer, and in accordance with the recommendation of the Commanding Officer of the First Brigade, Haiti, ten additional Jeffery quads were supplied to the command.

AT VERA CRUZ

The three Benz trucks, which are big 5-ton fellows, came into the possession of the Marine Corps in an unusual manner. When the Marines were ashore at Vera Cruz, in April, 1914, they had no means of transportation, and, on finding these trucks stored in the

Customs House, they were commandeered and used, performing the work required in an admirable manner. These trucks were later purchased by the Marine Corps directly from the Benz Company, and are now in use in Philadelphia.

RULES FOR OPERATION AND CARE

The following instructions are in force relative to the operation and care of motor vehicles belong to the Marine Corps, including trucks, motor cars and motorcycles:

1. Odometer readings on all motor vehicles will be taken each morning and each evening, and records made of daily mileage of each.

2. Records will be kept of all gasoline, oil, grease, repairs, repair parts, etc., furnished each vehicle. Comparison of consumption of gasoline, oil, etc., with daily mileage will be made in order to ascertain whether or not proper results are being obtained.

3. Each chauffeur will go over his truck or motor car daily; also operators of motorcycles, to see that all bolts, etc., are properly tightened up in order that they may always be kept at a maximum of mechanical efficiency, and to avoid accidents.

4. Governors on all trucks will be set for a maximum speed of not more than fourteen (14) miles per hour, except for light delivery wagons of the Ford type. Keys to locks on governors will be kept by the officer in charge of trucks.

5. Trucks will not be allowed to stand over night with loads on, unless some military emergency exists and with the approval of the officer in charge. When a truck for any reason is to remain in garage over twenty-four (24) hours, it will be jacked up sufficiently to lift all four wheels clear of the ground.

6. All trucks will be kept thoroughly washed and cleaned.

7. Chauffeurs will be responsible that trucks and motor cars always have sufficient water, gasoline, oil, and grease; also that the full complement of tools is always on hand, and kept in place provided therefor.

8. No greater load than that of the guaranteed total capacity of the truck, motor wagon, or motorcycle, as the case may be, will be carried except with the permission of the officer in charge.

9. All tires are guaranteed for a certain mileage, and an accurate record should be kept of each tire so that in the event it does not run its guaranteed mileage, refund may be obtained for the difference on the purchase of new tires. Requisitions for new tires will

show guaranteed mileage of old tire; also actual mileage performed. Pneumatic tires will be kept inflated to the number of pounds pressure advised by the manufacturers and usually indicated thereon.

10. Chauffeurs or operators of motorcycles will immediately report to the officer in charge any defects that they may know or believe to exist in the vehicles they are operating.

11. No unauthorized person will be allowed to ride on motor trucks, motor cars, or motorcycles.

ARMORED AUTOMOBILES IN WAR

The following summary of the use of armored automobiles by the European powers in the present war, as given by the *Svensk Artilleri Tidskrift*, will be of interest to the Corps:

"The requisites for a satisfactory armored car are great mobility in connection with sufficient armored cover for the armament, personnel and vehicle, and also a great rapidity of fire of gun or guns with which it is armed. It has been found very difficult to combine these requirements, since the car will be too heavy if it has sufficiently heavy armor, and no satisfactory car has yet been devised. France has at present three types of armored cars in use. One of these, manufactured by Schneider & Co., has an ordinary four-cylinder motor and weighs about 6 tons. The chauffeur's seat, wheels and machinery are protected by armor, so that the machine looks like an armored chest. Behind the chauffeur's seat is a casemate, 2 m. long, 1.9 m. high and 1.7 m. wide, with place for six riflemen. On each side are four port holes in two tiers. They can be covered with small shields. To the rear is a similar port hole. The front seat and casemate are covered by a movable roof through which entry is made into the casemate.

"Another armored motor car constructed by the same firm has a movable turret for a rapid-fire gun instead of a casemate. Another French firm, Charron, has constructed a car similar to the above mentioned, but designed for machine guns instead of the rapid-fire gun.

"Accompanying Canada's second contingent was an armored motor battery consisting of six armored motors, each armed with a rapid-fire gun, two freight motor trucks, one construction and repair truck, one large passenger car and six motorcycles.

"Belgium, at the outbreak of the war, had doubtless the best organized automobile corps of all such organizations. It consisted of three armored passenger automobiles (for officers, reconnaissance purposes, etc.), ten armored cars, each armed with two 40 cm. rapid-fire guns, two freight auto trucks for ammunition, one work shop auto, three trucks for tools and spare parts, one ambulance, one hundred bicycle riders and fifty motorcycle riders. The cars were only partially armored and therefore comparatively light and mobile.

"Russia, Italy, Germany and Austro-Hungary are also using this weapon to a greater or less extent. Experience seems to indicate that machines weighing over 3 tons are not suitable owing to their small mobility. A speed of 50 km. per hour is considered necessary, also steering apparatus at both ends so as to avoid turning around, and two speeds for backing instead of one.

"Automobiles for anti-aircraft are also used to a great extent, owing to their mobility. The machines used for this purpose are either light ones similar to passenger automobiles or light motor trucks, as the guns mounted on them are usually of small caliber. To protect the car from shock, a strut or other support is put under the gun carriage to take up the shock of recoil.

"Automobiles for the aero service are also used both to assist in moving the aeroplanes, their personnel, material for repair, etc., and also to transmit orders, etc.

"Automobiles have also been used extensively to carry mail in the field from the railway stations to the troops. For this purpose ordinary automobiles have been used, and in some cases three-wheeled automobiles owing to their mobility. Also specially designed post autos or mail cars are employed, in which the distribution of the mail can take place while they are in motion, as well as small cars similar to those used in cities. The number of post autos in use in the German army is estimated at 1,000.

"Automobiles are also used to transport searchlights and to furnish power for the same, for the transport of field telegraph material, for wireless telegraph with the automobile as power and for numerous other purposes, even such as movable laundries."

SCOUTING FLIGHTS IN DEFENSE OF ISOLATED NAVAL BASES

MAJ. HENRY C. DAVIS, U. S. MARINE CORPS

THE defense of all strongholds situated on islands, whether they are naval bases or army bases, should be at the water line. To assume that an enemy can be given a foothold and then driven off is a faulty conception of defense. Yet there are instances where elaborate plans have been drawn, based on this give-and-take policy, but the tactical or strategical idea responsible for such a plan is indefinite and hazy.

Where isolated strongholds are situated on small islands it becomes essential for the garrison, which is apt to be on a peace basis and not at the strength the importance of the position demands, to have the earliest intimation of an impending attack. If the coast line of the island is a difficult one, and if it is made more so by the use of artificial entanglements and impedimenta to free access, the concentration of even a small garrison may drive off the attack of a numerically greater force. Such a local success may mean the difference between the ultimate victory or defeat of the fleet using the stronghold as an overseas base.

There is no means yet devised by which information can be obtained so far in advance as that obtained by fast air scouts. Their circle of vision are dependent on their height, and their speed is so much greater than any other craft that they can cover distances and return with either positive or negative information which may be invaluable to the officer intrusted with the defense of a naval base.

In the cases of bases which are situated overseas and at great distances from the home country, it is likely that reinforcements cannot be rushed to the threatened points because war, if it comes, will be sudden. To ship troops long distances without complete control of the sea is suicidal.

The addition of aero craft to the defenses of such bases is therefore an imperative necessity. The defenses of such bases will consist of floating and fixed defenses, and in addition there will be the mobile troops on the land to go to threatened points. It is to be strongly emphasized that the greatest single item of information which the commander of such troops can have is the point where the disembarkation of the attacking troops will be made. He can

then make deployments to meet the situation and can take advantage of his *early* information to increase the strength of the position he occupies for the purpose of preventing the landing.

Scouting vessels thrown out in formations covering the probable routes of approach of an enemy and using the various methods of search will come into contact with the enemy and report by their wireless, but in the process of making contact there is the ever-present likelihood of the scout being sunk, and her information may be interrupted before it can be delivered. Besides this, the cost of the scout vessel—and it is proper to state here that the place for the proper employment of the scout vessel is with the fleet and not tied to the defense of a shore base—is probably equal to the cost of many efficient aeroplanes; many more than would be needed for the *best* information service in connection with the defense of the base.

Assuming that the aircraft is made a part of the defense of all such bases, we are confronted with the problem of their most efficient use in the solution of the scouting problem.

Taking a squadron of eight machines as the basis of our organization, how should they be employed to get the best results? The ideal condition is presented by a combination of the seaplane and scout vessel. But if we consider only the employment of the land types, leaving from and returning to the land, we have the conditions which are most likely to be met.

The European standard seems to be eight hours at full speed, and full speed seems to be between 60 and 90 miles an hour. Assuming as a safe estimate a speed of 75 miles an hour, and seven hours' endurance, the aircraft on scouting duty will be enabled to proceed out three hours and return in three hours, leaving an hour for a safety margin.

The scout can then cover $262\frac{1}{2}$ miles, if he goes out and returns by the same route. We must allow, however, for the scout to climb to the height at which he is to proceed, and in the absence of the enemy he need not go to a very great altitude. If we assume that his machine will climb at the rate of 4,000 feet an hour, he will still have three hours for advance if he proceeds to that height. The descent will, of course, be more rapid.

At an elevation of 5,000 feet the scout will be in the center of a circle of vision whose radius is about 70 miles, and he will be enabled to locate an enemy fleet or a convoy of transports at a distance of 300 miles from the island from which he started.

Whether or not his work will have been completed when he has

located the enemy is dependent on the instructions he receives, but the knowledge that an enemy is 300 miles away and making for the base gives at least twenty-five hours' advance notice, assuming the enemy speed to be 12 knots. It is more apt to be 10, and in that case we have thirty hours' advance knowledge of his approach.

His actual disembarkation cannot take place very far off from the shore of his objective. This distance will be controlled by the craft attached to the base and by the guns located for its defense. With the machines in the air and thus having the entire fleet of transports in view, a central position, from which to move to the real point of landing without being misled by feints to draw off our forces, can be assumed.

These assumptions are based on the flight of the scout being out and in on the same line, but there is possible method of flight which will give greater results in that more area is covered.

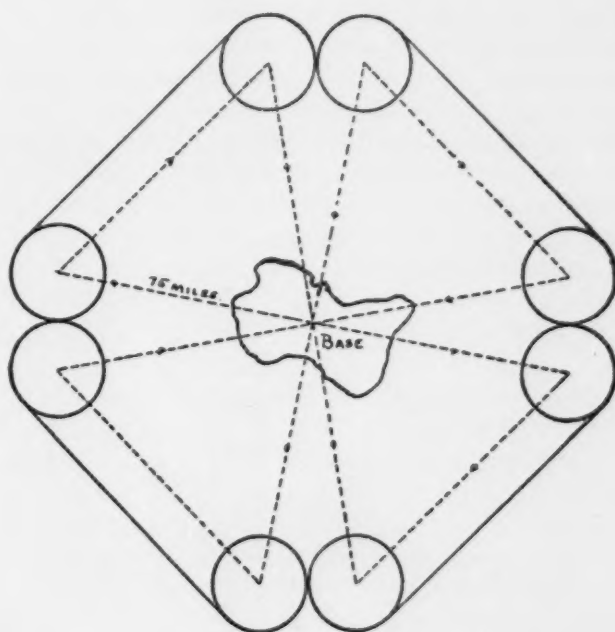


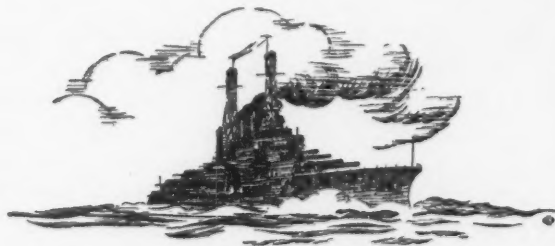
Fig 1

NOT DRAWN
TO SCALE

In covering the surrounding waters for a reconnaissance from an island, Fig. 1 will give an idea of what may be done to cover the greatest possible area. The four scouts starting from a central position fly along the dotted lines. These are 75 miles long on the longest legs, and therefore give a margin for safety. When at the end of the first leg their circles of visibility extend out to the line tangent to the vertical radius at the point of turning and extend 70 miles approximately beyond the trace of the scouts' path. The same occurs when the turn from this leg for home occurs, and as the scouts approach the landing their visibility circles intersect and overlap, so that this area is very effectively covered.

The service of information for modern war conditions is very important, and it is well understood. We may therefore hope to have news of the departure of an enemy force from his home country. The science of deduction and the estimate of the situation give us a clue as to his probable destination. With this basic information we can devise other means of scouting, which allow us to cover the probable routes of approach of such an enemy force.

That the air scout is essential to the proper protection of such bases as have been discussed cannot be questioned. We do not expect them to drop destroying bombs down the smokestacks of the enemy ships, though the moral effect of just that very possibility exists and has its influence on the mental condition of the enemy commander, but the aircraft, employed on a legitimate and efficient scouting mission, will well repay the small outlay required for the building of an efficient air fleet.



THE AMERICAN SYSTEM OF DISCIPLINE

CAPTAIN JESSE F. DYER, U. S. MARINE CORPS

IN the Act of August 29, 1916 (Naval Appropriation Act), there is a provision "That the Naval Militia shall be subject to the system of discipline prescribed for the United States Navy and Marine Corps." A question having arisen as to the meaning of the words, "system of discipline," as used in this act, the opinion of the Judge Advocate General of the Navy was requested in the premises. In preparing his opinion, a careful historical study was made and the following extract from the *Journals of Congress*, March 29, 1779 (vol. 5, page 90), was quoted:

"A letter, of the 25th, from Baron de Steuben, was read, accompanied with a system of regulations for the infantry of the United States; also a letter from the board of war, representing that Baron de Steuben, inspector-general, has formed a system of exercises and discipline for the infantry of the United States; that the same has been submitted to the inspection of the commander-in-chief, and his remarks thereon and amendments incorporated in the work; that it has been examined with attention by the board, and is highly approved, as being calculated to produce important advantages to the states; and therefore praying 'that it may receive the sanction of Congress and be committed to the press'; whereupon,

"Congress passed the following order, to be prefixed to said regulations for the order and discipline of the troops of the United States:

"Congress judging it of the greatest importance to prescribe some invariable rules for the order and discipline of the troops, especially for the purpose of introducing an uniformity in their formation and manoeuvres, and in the service of the camp:

"Ordered, That the following regulations be observed by all the troops of the United States, and that all general and other officers cause the same to be executed with all possible exactness."

A copy of the "Regulations" was found in the Library of the Navy Department, being the Fifth Edition Revised, Printed and Sold by Thomas Gre— (the rest of the name being worn off the page) at his Printing-Office, No. 25, Water-Street, in New York, in 1787.

The first part of the regulations deals with drill regulations, castrametation, care of the sick, care of arms, marches, etc. The second part consists of "Instructions," which part is herewith produced.

It is doubtful if there are very many of the books in existence and there is only one copy in the Department library. As the reader will observe, similar instructions will be found, in some cases, in present regulations and instructions for the Army and Marine Corps, which may have come down from the original source or may have been rediscovered and readopted as a result of contemporaneous study and experience. It is very interesting to note that, in spite of changes in tactics, there has been little or no change in the psychological aspects of training, with which the Instructions mostly deal. Without doubt, if we had the complete records, we could find similar instructions for the officers of all armies back to the most ancient times. Steuben was an educated soldier and was able to draw from the experience of the past for application to the then present.

Extract from "Regulations for the Order and Discipline of the Troops of the United States," by Baron de Steuben, late Major-General, and Inspector-General, in the Army of the United States, adopted by Congress, March 29, 1779:

INSTRUCTIONS FOR THE COMMANDANT OF A REGIMENT.

The state having entrusted him with the care of a regiment, his greatest ambition should be to have it at all times and in every respect as complete as possible; to do which he should pay great attention to the following objects:

The preservation of the soldiers' health should be his first and greatest care; and as that depends in a great measure on their cleanliness and the manner of living, he must have a watchful eye over the officers of companies, that they pay the necessary attention to their men in those respects.

The only means of keeping the soldiers in order is to have them continually under the eyes of their superiors; for which rea-

son the commandant should use the utmost severity to prevent their straggling from their companies, and never suffer them to leave the regiment, without being under the care of a non-commissioned officer, except in cases of necessity. And in order to prevent any man's being absent from the regiment without his knowledge, he must often count the files, and see that they agree with the returns delivered him, strictly obliging every man returned fit for duty to appear under arms on all occasions; and if any are missing, he must oblige the commanding officer of the company to account for their absence. In a word, the commandant ought to know upon what duty and where every man of his regiment is. To these points the other field officers must also pay attention.

The choice of non-commissioned officers is also an object of the greatest importance; the order and discipline of a regiment depends so much upon their behaviour, that too much care cannot be taken in preferring none to that trust but those who by their merit and good conduct are entitled to it. Honesty, sobriety, and a remarkable attention to every point of duty, with a neatness in their dress, are indispensable requisites; a spirit to command respect and obedience from the men, an expertness in performing every part of the exercise, and an ability to teach it, are also absolutely necessary; nor can a sergeant or corporal be said to be qualified who does not write and read in a tolerable manner.

Once every month the commandant should make a general inspection of his regiment, examine into the state of the men, their arms, ammunition, accoutrements, necessities, camp utensils, and everything belonging to the regiment, obliging the commanding officers of companies to account strictly for all deficiencies.

He should also once every month assemble the field officers and the eldest captain, to hold a council of administration, in which should be examined the books of the several companies, the paymaster and quartermaster, to see that all receipts and deliveries are entered in proper order, and the affairs of the regiment duly administered.

All returns of the regiment being signed by the commanding officer, he should examine them with the greatest care before he suffers them to go out of his hands.

The commandant must always march and encamp with his regiment; nor must he permit any officer to lodge out of camp, or in a house, except in case of sickness.

On a march he must keep his regiment together as much as possible, and not suffer the officers to leave the platoons without his permission; nor permit any of them, on any pretence whatsoever, to mount on horseback. There is no fatigue the soldiers go through that the officers should not share; and on all occasions they should set them examples of patience and perseverance.

When a regiment is on a march, the commandant will order a sergeant and six men into the rear, to bring up all stragglers; and the sergeant, on his arrival in camp or quarters, must make his report to him.

In a word, the commanding officer of a regiment must preserve the strictest discipline and order in his corps, obliging every officer to a strict performance of his duty, without relaxing in the smallest point; punishing impartially the faults that are committed, without distinction of rank or service.

INSTRUCTIONS FOR THE MAJOR

The major is particularly charged with the discipline, arms, accoutrements, clothing, and generally, with the whole interior management and economy of the regiment.

He must have a watchful eye over the officers, and oblige them to do their duty on every occasion; he must often cause them to be exercised in his presence, and instruct them how to command their platoons and preserve their distances.

He must endeavor to make his regiment perform their exercise and maneuvers with the greatest vivacity and precision, examine often the state of the different companies, making the captains answer for any deficiencies he may perceive, and reporting the same to the colonel.

He must pay the greatest attention to have all orders executed with the strictest punctuality, so far as respects his regiment; and should every week examine the adjutant's and quartermaster's books, and see that all returns, orders, and other matters, the objects of their respective duties, are regularly entered.

He must cause to be kept a regimental book, wherein should be entered the name and rank of every officer, the date of his commission, and the time he joined the regiment; the name and description of every non-commissioned officer and soldier, his trade or occupation, the place of his birth and usual residence, where, when and for what term he was enlisted; discharges, furloughs and

courts martial, copies of all returns, and every casualty that happens in the regiment.

He must be at all times well acquainted with the strength of his regiment and brigade, and the details of the army, and see that his regiment furnishes no more than its proportion for duty.

He must often inspect the detachments for duty furnished by his regiment, see that they are complete in every respect, and formed agreeably to the regulations.

On a march he must often ride along the flanks of his regiment, see that the platoons march in order, and keep their proper distances.

When the regiment is detached, he will post the guards ordered by the colonel, often visit them, examine whether the officers, non-commissioned officers, and sentinels are acquainted with their duty, and give instructions.

INSTRUCTIONS FOR THE ADJUTANT

The adjutant is to be chosen from among the subalterns, the field officers taking care to nominate one of the most intelligent and best acquainted with the service.

He must keep an exact detail of the duty of the officers and non-commissioned officers of his regiment, taking care to regulate his roster in such a manner as not to have too many officers or non-commissioned officers of the same company on duty at the same time.

He must keep a book, in which he must every day take the general and other orders, and show them to the commanding officer of the regiment, who, having added those he thinks necessary for the regiment, the adjutant must assemble the first serjeants of the companies, make them copy the orders, and give them their details for the next day.

He must attend the parade at the turning out of all guards or detachments, inspect their dress, arms, accoutrements and ammunition, form them into platoons or sections, and conduct them to the general or brigade parade.

When the regiment parades for duty or exercise, he must count it off, and divide it into divisions and platoons, and carry the orders of the colonel where necessary.

The adjutant is to receive no orders but from the field officers and officers commanding a battalion.

On a march he must ride along the flanks of the regiment, to

see that regularity is observed, and must pay attention to the serjeant in the rear, that he brings up all stragglers.

On the arrival of the regiment in camp, his first care is to form and send off the guards; and when the tents are pitched, he must immediately order out the necessary number of fatigue men to dig the vaults or sinks, and open the communications where necessary. He will then form the detachments for wood, water, and other necessities.

He must be constantly with the regiment, ready to receive and execute any orders that may come; nor must he go from his tent without leaving an officer to do his duty, or directions where he may be found.

INSTRUCTIONS FOR THE QUARTERMASTER

The quartermaster, being charged with encamping and quartering the regiment, should be at all times acquainted with its strength, that he may require no more ground than is necessary, nor have more tents pitched than the number prescribed: for both which he is accountable.

He must inform the regiment where to fetch their wood, water and other necessities, and where to pasture the horses.

He must instruct the quartermaster serjeant and pioneers in the manner of laying out the camp, agreeably to the order prescribed in the regulations.

He is answerable for the cleanliness of the camp, and that the soldiers make no fire anywhere but in the kitchens.

When the army marches, he must conduct the pioneers to the place appointed, and order the quartermaster serjeant to take charge of the baggage.

He is to make out all returns for camp equipage, arms, accoutrements, ammunition, provisions, and forage, and receive and distribute them to the regiment, taking the necessary vouchers for the delivery, and entering all receipts and deliveries in a book kept by him for that purpose.

He must pay particular attention to the preservation of the camp equipage, cause the necessary repairs to be done when wanting, and return everything unfit for use to the stores from which he drew them.

The preservation of the arms, accoutrements, and ammunition is of such essential importance, that he must be strictly attentive

to have those of the sick, of the men on furlough, discharged, or detached on command without arms, taken care of and deposited with the brigade conductor, as directed in the regulations.

INSTRUCTIONS FOR THE CAPTAIN

A captain cannot be too careful of the company the state has committed to his charge. He must pay the greatest attention to the health of his men, their discipline, arms, accoutrements, ammunition, clothes, and necessaries.

His first object should be, to gain the love of his men, by treating them with every possible kindness and humanity, inquiring into their complaints, and when well founded, seeing them redressed. He should know every man of his company by name and character. He should often visit those who are sick, speak tenderly to them, see that the public provision, whether of medicine or diet, is duly administered, and procure them, besides, such comforts and conveniences as are in his power. The attachment that arises from this kind of attention to the sick and wounded, is almost inconceivable; it will, moreover, be the means of preserving the lives of many valuable men.

He must divide his company into four squads, placing each under the particular care of a non-commissioned officer, who is to be answerable for the dress and behavior of the men of his squad.

He must be very particular in the daily and weekly inspections of his men, causing all deficiencies to be immediately supplied; and when he discovers any irregularity in the dress or conduct of any soldier, he must not only punish him, but the non-commissioned officer to whose squad he belongs.

He must keep a strict eye over the conduct of the non-commissioned officers; oblige them to do their duty with the greatest exactness; and use every possible means to keep up a proper subordination between them and the soldiers: for which reason he must never rudely reprimand them in the presence of the men, but at all times treat them with proper respect.

He must pay the utmost attention to everything which contributes to the health of the men, and oblige them to keep themselves and everything belonging to them in the greatest cleanliness and order. He must never suffer a man who has any infectious disorder to remain in the company, but send him immediately to the hospital, or other place provided for the reception of such pa-

tients, to prevent the spreading of the infection. And when any man is sick, or otherwise unfit for duty, or absent, he must see that his arms and accoutrements are properly taken care of, agreeably to the regulations prescribed.

He must keep a book in which must enter the name and description of every non-commissioned officer and soldier of his company; his trade or occupation; the place of his birth and usual residence; where, when and for what term he enlisted; discharges, furloughs, copies of all returns, and every casualty that happens in the company. He must also keep an account of all arms, accoutrements, ammunition, clothing, necessities and camp equipage delivered his company, that on inspecting it he may be able to discover any deficiencies.

When the company arrive at their quarters after a march, he must not dismiss them till the guards are ordered out, and (if cantoned) the billets distributed, which must be as near together as possible; and he must strictly prohibit his men from vexing the inhabitants, and cause to be punished any that offend in that respect. He must acquaint them with the hours of roll-call and going for provisions, with their alarm post, and the hour of march in the morning.

If the company make any stay in a place, he must, previous to their marching, inspect into their condition, examine their knapsacks and see that they carry nothing but what is allowed, it being a material object to prevent the soldier loading himself with unnecessary baggage.

INSTRUCTIONS FOR THE LIEUTENANT

The lieutenant, in the absence of the captain, commands the company, and should therefore make himself acquainted with the duties of that station; he must also be perfectly acquainted with the duties of the non-commissioned officers and soldiers, and see them performed with great exactness.

He should endeavor to gain the love of his men, by his attention to everything which may contribute to their health and convenience. He should often visit them at different hours; inspect into their manner of living; see that their provisions are good and well cooked, and, as far as possible, oblige them to take their meals at regulated hours. He should pay attention to their complaints, and, when well founded, endeavor to get them redressed; but discourage them from complaining on every frivolous occasion.

He must not suffer the soldiers to be ill-treated by the non-commissioned officers through malevolence, or from any pique or resentment; but must at the same time be careful that a proper degree of subordination is kept up between them. Although no officer should be ignorant of the service of the guards, yet it particularly behoves the lieutenant to be perfectly acquainted with that duty; he being oftener than any other officer entrusted with the command of a guard—a trust of the highest importance, on the faithful execution of which the safety of an army depends; and in which the officer has frequent opportunities to distinguish himself by his judgment, vigilance, and bravery.

INSTRUCTIONS FOR THE ENSIGN

The ensign is in a particular manner charged with the cleanliness of the men, to which he must pay the greatest attention.

When the company parades, and whilst the captain and lieutenant are examining the arms and accoutrements, the ensign must inspect the dress of the soldiers, observing whether they are clean, and everything about them in the best order possible, and duly noticing any who in these respects are deficient.

He must be very attentive to the conduct of the non-commissioned officers, observing that they do their duty with the greatest exactness; that they support a proper authority, and at the same time do not ill-treat the men through any pique or resentment.

As there are only two colours to a regiment, the ensigns must carry them by turns, being warned for that service by the adjutant. When on that duty, they should consider the importance of the trust reposed in them, and when in action, resolve not to part with the colours but with their lives. As it is by them the battalion dresses when marching in line, they should be very careful to keep a regular step, and by frequent practice accustom themselves to march straight forward to any given object.

INSTRUCTIONS FOR THE SERJEANT MAJOR.

The serjeant major, being at the head of the non-commissioned officers, must pay the greatest attention to their conduct and behaviour, never conniving at the least irregularity committed by them or the soldiers, from both of whom he must exact the most implicit obedience. He should be well acquainted with the interior management and discipline of the regiment, and the manner of keeping

rosters and forming details. He must always attend the parade, be very expert in counting off the battalion, and in every other business of the adjutant, to whom he is an assistant.

INSTRUCTIONS FOR THE QUARTERMASTER SERJEANT.

He is an assistant to the quartermaster of the regiment, and in his absence is to do his duty, unless an officer be specially appointed for that purpose: He should therefore acquaint himself with all the duties of the quartermaster before mentioned. When the army marches, he must see the tents properly packed and loaded, and go with the baggage, see that the waggoners commit no disorders, and that nothing is left out of the waggons.

INSTRUCTIONS FOR THE FIRST SERJEANT OF A COMPANY

The soldier, having acquired that degree of confidence of his officers as to be appointed first serjeant of the company, should consider the importance of his office; that the discipline of the company, the conduct of the men, their exactness in obeying orders, and the regularity of their manners, will in a great measure depend on his vigilance.

He should be intimately acquainted with the character of every soldier of the company, and should take great pains to impress upon their minds the indispensable necessity of the strictest obedience, as the foundation of order and regularity.

He will keep the details of the company, and never warn a man out of his turn, unless particularly ordered so to do.

He must take the daily orders in a book kept by him for that purpose, and show them to his officers.

He must every morning make a report to the captain of the state of the company, in the form prescribed; and at the same time acquaint him with anything material that may have happened in the company since the preceding report.

He must parade all guards and detachments furnished by his company, examining their arms, ammunition, accoutrements, and dress, before he carries them to the parade; and if any man appears unfit, he must supply his place with another, and have the defaulter punished: for this purpose he must always warn a man or two more than ordered, to serve as a reserve, who, if not wanted, will return to their companies.

He will keep the company book (under the inspection of the

captain), in which he will enter the name and description of every non-commissioned officer and soldier; his trade and occupation; the place of his birth and usual residence; where, when, and for what term he was enlisted; the bounty paid him; the arms, ammunition, accoutrements, cloathing and necessities delivered him, with their marks and numbers, and the times when delivered; also copies of all returns, furloughs, discharges, and every casualty that happens in the company.

When each soldier shall be provided with a small book, the first serjeant is to enter therein the soldier's name, a copy of his enlistments, the bounty paid him, the arms, accoutrements, cloathing and necessities delivered him, with their marks and numbers; for this purpose he must be present at all distributions in his company; and as often as arms, cloathing, etc., are delivered, he must enter them in the soldier's as well as the company's book.

The first serjeant is not to go on duty, unless with the whole company, but he is to be always in camp or quarters, to answer any call that may be made.

He is never to lead a platoon or section, but is always to be a file-closer in the formation of the company, his duty being in the company like the adjutant's in the regiment.

INSTRUCTIONS FOR THE SERJEANTS AND CORPORALS

It being on the non-commissioned officers that the discipline and order of a company in a great measure depend, they cannot be too circumspect in their behaviour towards the men, by treating them with mildness, and at the same time obliging every one to do his duty. By avoiding too great a familiarity with the men, they will not only gain their love and confidence, but be treated with a proper respect; whereas by a contrary conduct they forfeit all regard, and their authority becomes despised.

Each serjeant and corporal will be in a particular manner answerable for the squad committed to his care. He must pay particular attention to their conduct in every respect; that they keep themselves and their arms always clean; that they have their effects always ready, and put where they can get them immediately, even in the dark, without confusion; and on every fine day he must oblige them to air their effects.

When a man of his squad is warned for duty, he must examine him before he carries him to the parade, obliging him to take all

his effects with him, unless when specially ordered to the contrary.

In teaching the recruits, they must exercise all their patience, by no means abusing them, but treating them with mildness, and not expect too much precision in their first lessons, punishing those only who are wilfully negligent.

They must suppress all quarrels and disputes in the company; and where other means fail, must use their authority in confining the offender.

They should teach the soldiers of their squads how to dress with a soldier-like air, how to clean their arms, accoutrements, etc., and how to mount and dismount their firelocks; for which purpose each non-commissioned officer should always be provided with a turncrew, and suffer no soldier to take his arms to pieces without his permission.

On a march the non-commissioned officers must preserve order and regularity, and suffer no man to leave the ranks without permission of the officer commanding the platoon.

A corporal must teach the sentinels to challenge briskly, and everything else they are to do in their different situations; and when he relieves them, must make them deliver the orders distinctly.

When a guard is relieved, the non-commissioned officers take the orders from those whom they relieve; when sent to visit the sentries, they should instruct them in their duty. They should reconnoitre the roads they are to patrol in the night, that they may not lose themselves. They must make their patrol with the greatest silence and attention, and where necessary, send a faithful soldier ahead to look out. If they meet a detachment of the enemy stronger than their own, they must retreat in order to their own post. In the night they must stop all strangers that approach. They must not suffer their men to make the least noise with their arms or accoutrements, and every now and then stop and listen. On their return from patrolling, they must report to the officer what they have seen and heard.

When a non-commissioned officer is a file-closer in an action, he must take care to keep the ranks and files properly closed, and when too much crowded, make them incline from the center. When the files of his platoon are disordered by the loss of men, he must exert himself to dress and complete them afresh, with the utmost expedition. He must keep the greatest silence in the ranks, see that the men load well and quick, and take good aim. He will do

all in his power to encourage the soldiers, and use the most vigorous means to prevent any from leaving the ranks, unless wounded.

INSTRUCTIONS FOR THE PRIVATE SOLDIER

The recruit having received his necessaries, should in the first place learn to dress himself with a soldier-like air; to place his effects properly in his knapsack, so as to carry them with ease and convenience; how to salute his officers when he meets them; to clean his arms, wash his linen and cook his provisions. He should early accustom himself to dress in the night; and for that purpose always have his effects in his knapsack, and that placed where he can put his hand on it in a moment, that in case of alarm he may repair with the greatest alertness to the parade.

When learning to march, he must take the greatest pains to acquire a firm step and a proper balance, practicing himself at all his leisure hours. He must accustom himself to the greatest steadiness under arms, to pay attention to the commands of his officers, and exercise himself continually with his firelock, in order to acquire vivacity in his motions. He must acquaint himself with the usual beats and signals of the drum, and instantly obey them.

When in the ranks, he must always learn the names of his right and left-hand men and file leader, that he may be able to find his place readily in case of separation. He must cover his file-leader and dress well in rank, which he may be assured of doing when he can just perceive the breast of the third man from him. Having joined his company, he must no longer consider himself as a recruit, but as a soldier; and whenever he is ordered under arms, must appear well dressed, with his arms and accoutrements clean and in good order, and his knapsack, blanket, etc., ready to throw on his back in case he should be ordered to take them.

When warned for guard, he must appear as neat as possible, carry all his effects with him, and even when on sentry must have them at his back. He must receive the orders from the sentry he relieves; and when placed before the guard-house, he must inform the corporal of all that approach, and suffer no one to enter until examined; if he is posted at a distance from the guard he will march there in order, have the orders well explained to him by the corporal, learn which is the nearest post between him and the guard, in case he would be obliged to retire, or have anything to communicate, and what he is to do in case of an alarm, or if in

town, in case of fire and any disturbance. He will never go more than twenty paces from his post; and if in a retired place, or in the night, suffer no one to approach within ten paces of him.

A sentinel must never rest upon his arms, but keep walking on his post. He must never suffer himself to be relieved but by his corporal; challenge briskly in the night, and stop those who have not the countersign; and if any will not answer to the third challenge, or having been stopped should attempt to escape, he may fire on them.

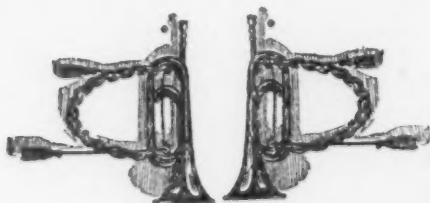
When on patrol, he must observe the strictest silence, nor make the least noise with his arms or accoutrements.

In action he will pay the greatest attention to the commands of his officers, level well, and not throw away his fire; take particular care to keep his rank and file, incline to that side he dresses to, and encourage his comrades to do their duty.

When ordered to march he must not charge himself with any unnecessary baggage; he will march at his ease, without, however, leaving his rank or file; he should drink as seldom as possible, and never stop but when necessity obliges him, in which case he must ask leave of the commanding officer of the platoon.

When arrived at camp or quarters, he must clean his arms, prepare his bed, and go for necessities, taking nothing without leave, nor committing any kind of excess.

He must always have a stopper for the muzzle of his gun in case of rain, and when on a march: at which times he will unfix his bayonet.



A HAITIAN RECONNOISSANCE

CAPTAIN WALTER N. HILL, U. S. MARINE CORPS

RUMORS had come to our isolated detachment of United States Marines at Aux Cayes, on the southern coast of Haiti, of an impending uprising against the American occupation by the Piquettes, the Nationalists of the South. In the North the Caco wing of the Nationalists had flamed out in open resistance and the First Regiment had seen lively campaigning. Finally the vague rumors centered on a reported plan of the Piquettes to rally their forces at Les Platones, in the Motte range of mountains, and from there to launch open hostilities. There were ninety of us, all told, to uphold the prestige of the flag in that part of southern Haiti, split into two detachments with the majority of the force at Aux Cayes, a city of 20,000, teeming with life and squalor. Once or twice a month one of our gunboats put in at Aux Cayes with mail and stores and then steamed out, picturesque in her bulging sponsons and towering stacks, for the 17th Company at Jacmel, ninety odd miles to the eastward.

To run down these persistent rumors, to show the restless Piquettes the uniform of the forces of occupation, and to penetrate into the little known district in which they were supposed to be operating was our mission. The Valley of Cayes, walled in on the north by the Montagnes de la Hotte, and on the south by the Montagnes de la Notte, stretched away like a great V to where the towering ranges merged with the Magaya range. In Aux Cayes even, little definite could be learned about this district except that the valley was a fertile paradise where cane, oranges, pineapples and grapefruit grew almost untended. Along the mountain slopes, we heard, stretched mile after mile of neglected coffee trees and cotton and tobacco that needed but the hand of man to make progress against the encroaching jungle. We found it painted a rich green, with its fields of untended cane, and here and there the jungle growth failed to obscure the ruins of the old French sugar mills. Today Haiti imports her sugar!

There was only the flicker of an occasional charcoal fire in all Aux Cayes when we filed out of it at 4 o'clock on a December morning to make a reconnaissance of this primitive part of the Black Republic. There were eight of us, one officer and six enlisted men,

and Gilibert to interpret the curious French potois of the interior. The way of the Haitian burro is strange and wayward, so one of the men led the head of the pack train of five laden burros, another the rear beast, and each burro was tethered to its mates. The sun was just blinking through the palms that fringed the banks of the Grande Ravine Riviere when we forded it. Here we entered the road to Torbeck, at the foot of the Montagnes de la Hotte. In the days of the French it had been broad and paved. We found it almost impassable at points, leading through streams and swamps, and treacherous with mudholes and rocks. Only the ruins of stone culverts and traces of the old roadbed told their too familiar story of the almost unbelievable neglect that has fastened upon Haiti.

It was a lively road, nevertheless, with its women and young girls leading in their burros loaded with market produce for the city. They affected the brightest hues of red, yellow and blue and all wore the broad-brimmed straw hat of Haiti. The more fastidious had tied their shoes and stockings on the top of their packs, to don them at the outskirts of Aux Cayes. In close proximity to these evidences of a vanity that had survived where stone culverts had fallen, were squealing pigs lashed firmly to the packs, poultry and vegetables. They gave us subdued but polite "*Bon jours*," for under the American occupation there are no longer police of the Arrondissement to halt them for petty fees; no squads of brutal soldiery with bone-breaking clubs to impress their men into the old war against the Cacos of the North; no more Chiefs of Sections to browbeat and extort their hard-won savings. We had found them a simple, industrious and hospitable folk.

The first 9 miles of the Torbeck road led us through a flat country honeycombed with water courses. One of our burros slipped into a mudhole, stumbled from the trail and disappeared in a swampy stretch except for a frantically waving pair of hind legs. Our efforts to rescue him were futile, for it takes a Haitian to rescue a Haitian burro. An old woman hitched her only garment about her waist, waved us aside and caught at the burro's halter. With an unceasing, shrill falsetto, she pulled and hauled and twisted him back to dry land, but minus his pack. He was a comical sight, as he stood in the trail, great ears drooped in dejection, eyes closed, and his brown face plastered with mud. The old dame washed his face, still shrilling at him, and she was blowing her thanks in the road when we rewarded her magic with a half gourde, fifty cents in Haitian money.

At Torbeck the Commandant insisted on accompanying us to the limits of his district, and it was five hours after our start when he drew rein on the banks of the Riviere de L'Acul. With a grandiloquent gesture, he informed us that here lay the boundary between Torbeck and Port Salut and that, according to Haitian custom, he could not leave his own commune.

Across the river we tightened girths and readjusted packs before starting up the winding trail to the foothills of the Notte range. Thanks to the almost hidden work of the French engineers, although the climb was steady, none of the grades was excessive. Our horses slipped and floundered over the rock-strewn trail, but the little burros came into their own, skipping along the trail like sure-footed goats. The Commandant of Port Salut met us before we had made much progress into his bailiwick. Thin-faced, thin-lipped and morose, he presented his retinue of five, the Magistrate, Chief of Police, Customs Inspector, School Teacher and his Adjutant. Never shall I forget the Adjutant. The "Court Jester," the marines promptly dubbed him. His features were those of the typical Norfolk ducky, but the slight Haitian touch to his moustache and beard gave his face a comical aspect. He wore a bright red French forage cap, a blue jacket with a colonel's yellow device on his sleeve, and soiled white trousers. Without warning, he would dig his spurs into his poor beast and shoot up the trail with his legs spread apart like an extended nut-cracker, place his arms akimbo and look back for applause for his bizarre horsemanship.

The foliage was thinning out, and the tropical growth gave way to a scrub fir. The trail had narrowed to 8 feet, and on its outer edge was a sheer drop to the valley hundreds of feet below. To the right was the dark blue of the Caribbean, breaking on a graceful curve of beach. Aux Cayes was but a dim cluster. For 20 miles up the green valley of Cayes and even beyond the ridges of the opposite range spread an unobstructed view that more nearly rivalled that from the Pali at Honolulu than any of our party had seen.

We could make out the undulating slopes of the La Hotte, each sheltering its rich valley, and the Commandant, with true Haitian love of the dramatic, swept his hand towards the horizon.

"There," he said, "is Port Salut. We have arrived."

In Haiti one is always "arriving," even for hours before one does arrive.

The trail now led with sinuous grace downhill over a soil almost chalky in appearance. Under the hoofs of our little column it gave back an eerie, hollow sound. It was 1 o'clock when we came to a few straggling huts, the outskirts of Port Salut. For thirteen hours, except for brief halts, we had been in the saddle, and the sun was beating down with tropical fury.

The ragged outskirts were a true index to the Port Salut in which we made our first real halt. Its one street was ranged on either side with mud houses with thatched roofs. The street followed the contour of a steep cliff and 50 feet below thundered the sea. The backyards of half Port Salut overhung the cliff. Half the houses lay in ruins from the last hurricane that had visited the town and the indolent citizenry was well content to live in its ruins rather than rebuild. The corrugated iron roof of one house had been carried intact into the street and beneath its peaked shelter lived a family with the family pigs, chickens, turkeys and dogs.

The Administrative Police was drawn up in our honor before the Commandancia, mostly in motley uniform, while some unfortunates boasted neither red coat nor green trousers. As I reined in front of them they saluted bravely. Gilibert had been taken violently ill a few miles down the trail and we had left him there under the care of a sergeant. I was in sad need of his services, for the Syrian who claimed residence in Cuba must have learned his Spanish in Syria. With his Spanish and my French we were unable to demonstrate to Port Salut our need for water and grass for the horses. I had almost despaired when two natives led towards me an old, white-haired negro. Up from the crowd rose the exclamation: "Here comes the Englishman!"

Bewildered at the confusion, the old man stood still until I laid my hand on his arm and said:

"I am the white man, Captain Hill, the white captain. Can you understand me?"

A great smile creased his face and he peered at us through dim eyes.

"Oh, yes, the white American from Aux Cayes. Not since Captain Young¹ was here have I heard English. I cooked for him. Tell him you have seen me, Old Joe, and he will remember."

¹Major Charles Young, U. S. A., who served in Haiti and San Domingo as Military Attache.

He wandered on in his quavering, high-pitched voice, but finally I had my wants attended to. We pitched our shelter tents under the shade of a great mango tree and natives fought for the hard-tack with which we paid for water and firewood, and the lucky ones who drew the empty bacon tins rejoiced at the princely wage. Old Joe was of little help as an interpreter, for he had been drinking rum in honor of the great day. If I spoke to him he launched into a rambling yarn about his boyhood in Jamaica, the wreck of the British mule transport in 1900, his work with Captain Young, or the need of higher education for the Haitians.

Happily, Gilibert arrived, and then followed an interminable conference. With speeches and counter-speeches, and always disagreement, it was two hours before I extracted the few simple notes for my reconnaissance report of Port Salut.

We left early the next morning for Roche a Bateau, that is, I, with Gilibert, the Commandant and one well-mounted corporal, for the 25-mile march had told heavily on the rest of the escort and the pack train. Thirty-five miles of trail lay ahead of us before we would return to Port Salut. The trail to Roche a Bateau, save for a stretch of dirt road, was the worst I had seen in my tropical experience. Often we had to dismount and either drag our mounts up almost unscalable cliffs, or force them down equally dangerous inclines. It was a Haitian trail that had just "grewed" Topsy-like. It took us three and a half hours to cover the 12 miles to Roche a Bateau, a village without color or interest, on a stony beach.

Here, however, was Mr. C——, an Italian gentleman, who was buying coffee for an English-French house, and a delightful host. We had delicious coffee and rolls in the shade of his porch, facing the blue Caribbean. Except for the narrow and fertile strip on the lower hillsides facing the sea, no coffee is grown along the southern coast. From Roche a Bateau down the coast to Tiburon lies one of Haiti's greatest coffee districts. Without cultivation, and in spite of the great hurricane of last August, the prospect for the next crop was wonderful. From the various points along this strip the coffee is shipped to Aux Cayes by sloops and schooners. There it is prepared for the markets of Europe and the United States.

The General Commanding the Arrondissement of Coteaux and the Commandant de la Place visited us here with fifteen other

horsemen. They were dressed in black frock coats, derbies and patent leather shoes and, with their gray gloves, quite overwhelmed our little Commandant from Port Salut. With this imposing escort, which swelled to thirty when we rode into Coteaux, we were received with enthusiasm.

Like Port Salut, it is situated on a cliff overlooking the sea. In the hazy distance, Mt. Tiburon thrust its peaks 4,200 feet above the sea level. Coteaux entertained us with a reception and a really good dinner of fried chicken, candied sweet potatoes and Haiti's national dish of large red beans cooked in a thick gravy and served with rice. After dinner came the torrent of speeches. Here, indeed, is the land of true oratory, for the mixed strain of French and native blood has made a race to whom language is like a rushing mountain stream.

One day in Aux Cayes I heard a terrible wrangling in the street and asked Gilibert what it was all about.

"Oh, nothing. One fellow is asking another for a match and he argues that he has already lent him too many matches."

The trip back was not without incident. Night overtook us just before we made Port Salut, when the Commandant, who was leading, reined up to engage in earnest conversation with four or five men. One had a firebrand with which he swept the road for a lost soul, so Gilibert told me. Finally he announced that it was found and that we could go on. Being Americans, he explained, we had not the power to see it, but they, steeped in Voodooism, were easily deluded into the belief that they had found a lost spirit in the Haitian trail.

At Aux Cayes the blithe Adjutant joined us. The trail being too crowded to suit Jack, my horse, he promptly kicked the Court Jester and his sorry mount off the trail. No bones were broken and the Court Jester joined in the laugh at his expense.

We rode into Aux Cayes with our minds dispelled of any fears of a Piquette uprising, our mission successfully completed, and the first reconnaissance of the South was made.

HINTS TO THE FOOT-SOLDIER IN BATTLE

BY ANDRÉ LAFARGUE, CAPTAIN, 153D REGIMENT OF INFANTRY¹

PRECEPTS AND DUTIES OF THE FOOT-SOLDIER

*Precepts of a Foot-Soldier. The Infantryman is Victory's
Workman*

ALL arrangements having been made, the men fallen in, and everything being in readiness, the general sends his infantry into action.

Thenceforward, in the midst of shot and shell, they will scarcely hear any orders, and will see no reinforcements; they will be alone, but people are counting on them. They are victory's workmen.

Everyone, to the Humblest, is Responsible to His Country.

In these decisive hours, the man who is the hope of his country often does not think about that. The battle is limited to the immediate surroundings of his shelter; he thinks that he doesn't amount to much, concludes that his effort is almost useless, and sometimes says to himself: "What's the use of exposing myself any longer for so little?" Since there are no officers, because they are scattered here and there along the line, there is nothing to rouse the skirmisher and carry him along; he excuses himself by saying that he is doing as everyone else, and in this way the battle becomes stationary because the ultimate fractions no longer move.

When the skirmisher finds himself alone, and out of sight of his leaders, his country is still looking at him; whether he advances or falls, it blesses him.

In Battle, Fight

On the field of battle there are, first of all, the real combatants: those who do harm to the enemy. But there are also timid persons who lose their heads and think only of blotting themselves out in some hole. These latter appear for the sole purpose of furnishing useless corpses.

Whatever you may do, your life is exposed to danger; at least let it serve some useful purpose and be paid for in advance.

¹Translated by Lieut.-Commander W. N. Jeffers, U. S. Navy.

Live and Conquer

There is no question of getting yourself killed bravely and disappearing: you must live and conquer. In order to preserve their lives, cowards try not to expose them, but brave men rely upon their valor to protect themselves.

The coward is strongly tempted. It is more agreeable to stay in your hole than to advance amongst bullets, but the coward has no self-control and becomes foolish. This is why, if he succeeds in preserving his life once or twice, he finally makes a false move, which, in war, is paid for with one's life.

The brave man is cunning; he dares to look in the face of danger, knows when to scorn it in order to advance, and when it would be rash to face it. He is not afraid of the enemy, because the enemy is a man whom he can always get at, with boldness and skill.

A good rifle, nimble legs, a clear eye and a cool head; that is the charm to take you through bullets and enable you to kill your enemy.

Brave Men Make Good Soldiers

The man who is not a good soldier has no self-respect. In order to follow one's chiefs into danger, one must have respect and affection for them; the riff-raff has neither faith nor rule; it respects nothing, and loves itself only.

When the chief is gone and the soldier finds himself alone, what drives him along the path of duty in spite of all his agony and fear: his conscience.

Complete Victory

Many Frenchmen have already given their lives for victory. Henceforward, has anyone the right to say he is tired and to stop? No; for one cannot profit by the sacrifices of one's comrades without bringing to an end the task for which they have died. No peace without complete victory, even at the cost of all your limbs.



Germany wanted war, and her claws must be drawn for a long time; people will bless us for it.

THE DUTIES OF THE SOLDIER

Follow the Chief

The chief is the rallying point; it is not necessary for him to watch his troops, for they should follow him blindly. If he falls, they keep on without him and avenge him.

Never abandon the body of an officer to the enemy; his troops carry it away or come back to look for it.

Avenge Your Dead

When he thinks about past combats, the combatant sees again his comrades who sleep in every patch of ground where the regiment has stood.

They have fallen, and others have taken their places in the company. They, so strong and brave, can do no more, but their memory lives and their sacrifice has not been in vain.

They are always in the hearts of those who remain, and at this thought every man feels a cold rage mount in him and render his arm stiffer and his eye clearer.

In the trench and in battle, you must not rest until you have made the enemy pay very dearly for the stricken comrade.

The dead cry for vengeance. No rifle shoots so straight as the rifle of a dead man.

Bury the Dead, Succor the Wounded

One should give honorable burial to one's dead comrades. You must have enough heart, in spite of fatigue and the oppression of danger, to bury them otherwise than in the first hole, with a little earth on top of the body.

You must bind up the wounded, and, when you cannot leave your station, put them under cover until the occasion allows you to take them to the rear, even though you are ready to drop with fatigue and sleep.

Do Harm to the Germans

This idea should always be awake in the heart of the combatant. It gives him that silent and ferocious ardor which is the real thing; if he is ready to faint, it sustains him. When you are suffering and

you feel your courage ebbing, put a cartridge in your rifle and aim straight.

Conduct toward Prisoners

You must spare the enemy who surrenders, while always on guard against the treacheries which are customary among the Germans. To massacre for the pleasure of killing is a cowardly barbarism which dishonors the troops.

However, in the mêlée, so long as resistance continues and there is risk of the enemy regaining the upper hand, there must be no quarter, for mercy often costs dear.

The wounded enemy is an unfortunate who should be succored, and you must no longer be conscious of the hated uniform.

Always Remember That You Are a Frenchman

In a word: If the foot-soldier asks himself how he should behave, let him always remember that he is a French soldier.

WHEN IS A MAN TIMID OR A COWARD?

Trials are awaiting the soldier at every step on the field of battle; he must be well acquainted with them in order to resist them, and to bring back to the straight path the comrade who abandons himself to the temptations of fear.

You are not timid or a coward because you are afraid or feel sick; so if you should feel that way, *don't get discouraged and lose confidence in yourself.*

Danger always makes a strong impression on people, and no one ever gets used to shot and shell; it's too contrary to human nature. However, as you become seasoned to war, and become better acquainted with danger, you will be less rattled because you will know when there is something to be afraid of and when you can sleep in peace.

Sometimes a man feels out of sorts; his body suffers and his mind is sick. For instance, you find yourself suffering under the influence of bombardments or of violent combats; you remain motionless in the mud and cold and rain; the hours pass slowly; the war is long, and you speculate on the unknown of tomorrow. Then you get bad ideas in your head: this is the "blues." A man who has the "blues" is not a coward; he becomes one if he lets himself go, if he continually whimpers over his miseries and thenceforward

tries to find some way of leaving his post. He is a brave man if he says to himself: "I'm not worth much lately, but that will all pass by; let's wait, work or sleep."

The Timid Man

The timid man is a soldier who is afraid of a shadow.

He fires in the air or lets-go over the parapet without showing his head. He trembles, thinks himself lost, and falls back as soon as he sees an enemy advancing toward him; he cannot stand the sight of an adversary because he always believes he is stronger than himself.

When he is on sentry-go, he hears and sees Germans everywhere.

When on patrol or on picket (and this is when he is at his best), he is always imagining that a German is about to pounce upon him; if he hears a noise, he runs away at full speed, breathless, shouting that the enemy is advancing, and terrifying all hands; now, it's a cow moving about, or a wounded man moaning as he drags himself toward our lines.

The Coward

The coward is the man who abandons his post for any reason. He accompanies the wounded without orders, not to help them, but in order to get to the rear and stay there.

If he gets a slight wound or a scratch, he is perfectly happy and takes advantage of it to save himself and leave his comrades to face the worst of the danger.

It is absolutely forbidden to leave your post without authority.

He does not dare throw a grenade or fire a shot for fear of the reply.

Men who run away are cowards.

Those who surrender without having used all their *cartridges*, or without having done everything possible to escape from the enemy, are cowards.

The Riff-raff

These are those few individuals who have the well-advertised idea of not doing their duty or of committing some bad action.

Soldiers who get under cover: they sneak off and hide when their chief is not looking and only appear several days later, after the battle is over, saying that they got lost.

In former wars, when those men came in to eat in the evening, their messmates used to pass judgment on them and whip them till the blood flowed.

Men of this class do not want to expose themselves; they think of living later in peace and happiness while brave men have brought peace with their blood.

This trickery is not to be tolerated; *everybody must move on.*

WHEN IS A MAN BRAVE?

Most soldiers are brave; a great many of them don't even know it.

Trench Fighting

The foot-soldier in the trenches is not over-fond of work; he often prefers to curl up in the mud under indifferent shelter to taking a little trouble. So, when he is subjected to bombardment he has no cover to get under.

Furthermore, the foot-soldier considers that he is in the trench merely to keep the enemy from getting through if he attacks. Since the enemy does not attack every day, the fighting habit is lost, and the enemy is left to plant entanglements and dig his shelters without molestation, so that, when the time comes to attack him, you will have to go up against thoroughly prepared defenses, which must be taken by main force.

The enemy that you do not kill beforehand will perhaps kill you on the day of the assault.

What the Foot-Soldier Should Do in the Trenches

1. Be careful of himself.
2. Train himself and get seasoned to war.
3. Destroy Germans.

How to Take Care of Yourself

To get yourself killed or wounded in the trenches through carelessness or negligence is sheer stupidity because you have not been of any use. A soldier can never be replaced. Therefore build yourself a good shelter so that you can laugh at bombardments and sleep in peace. Do not do the imprudent things with which everybody is so familiar. Watch over your comrades who are careless, and especially over new-comers and young soldiers who want to see everything and are ignorant of trench customs.

How to Get Seasoned to War

In the trenches people fall into ways that are bad in battle. They stay continually in the shelters; when they move about, it is nearly always in the zig-zags, so that they find it very disagreeable to have to pass through open spaces where the bullets are whistling.

You must fortify yourself so as not to let any bullet bother you on the day of attack. To this end, go on patrol at night, and plant entanglements in front of the first line.

You should profit by your stay in the trench to learn skill which is your surest protection in battle.

Every day fire a carefully aimed string at the enemy's trench; study the point of aim of your rifle for different ranges; practice quick aiming to prepare yourself for firing at close range.

Every soldier familiarizes himself with the throwing of the different types of grenades; he should interest himself in everything charged with explosives, the methods of priming bombs, trench weapons, etc.

How to Destroy Germans with Your Rifle

You may pass months in front of an enemy's trench without seeing a single German; consequently, it is difficult to do them any harm.

However, with skill and patience, you will succeed in getting good results.

Begin by carefully watching the adversary's trench and learn exactly where you can get him if he shows himself for half a second.

Places Where the Enemy Hangs Out

Loopholes: All of these are not manned. Those which are too easily seen are simply to attract attention. Loopholes for rifle fire are often at the level of the ground, in which case they are only just wide enough to let the rifle through and are masked with sods or a tuft of grass.

In order to recognize the loopholes that are really manned, it is necessary to draw fire by showing a hat above the parapet, while other men to the right or left keep a lookout.

Shelters: There are always people about the entrances to the shelters; these are places where someone can always be surprised.

Shelters are indicated by an extra elevation of the parapet.

Generally, the enemy has the stupidity to cover his shelters with an excess of sandbags, which are visible even from outside the trench. A peephole is often to be found immediately alongside the shelter. Finally, escaping smoke is the best indication of the inhabited part.

Observation posts: These are indicated by an accumulation of sandbags and the regular appearance of periscopes. The periscopes do not extend much above the parapet and are often wrapped in grass or a sandbag, but minute observation of everything all the time will reveal their cautious appearance.

When the enemy artillery is firing or when his trench mortars are at work that is the time when you can observe some fleeting movement in the observation posts.

Times When the Enemy is Out of Doors

In the morning and on cold sunny days, everybody is out of doors.

At mess time in fair weather; this period is often indicated by a slackening of the rifle fire.

When our trenches are under bombardment, the enemy gathers about the loopholes to amuse himself.

At night, the enemy leaves his trenches to repair the damage to his defenses or entanglements caused by our artillery fire.

Reliefs: The time of relief can be recognized by the slackening of the rifle fire, the sound of voices, silhouettes at certain points when the zig-zags are impracticable.

You can always tell when relief has taken place by the change in the attitude and habits of the enemy. By repeating the observations, it is possible to learn the days for relief.

To mishandle the enemy arriving on relief is the best way of intimidating him during his stay in the trenches.

Organization of the Look-out

1. In order to observe a given spot, watch through a small peep-hole. The peep-hole is simply a hole made in the parapet with a stick or a pipe placed inside the trench and pointed at the spot to be watched. A few sods are placed at the outlet of the peep-hole so that it may not look too regular. Avoid looking continuously through wooden peep-holes or through the shields, as these are often spotted by the enemy

2. To watch a part of a trench, look through a peep-hole arranged on the bias in the parapet or use a periscope. Use a small piece of a mirror on the end of a stick, stuck in the reverse of the trench, for getting a general view of the enemy's trench.



Observation through binoculars (Chief of Section's glasses): As a rule, the enemy's trench appears to be completely deserted, but when looked at through binoculars, it is astonishing how many details are revealed. From time to time, you see the eye of the enemy look-out at his peep-hole, close up, or the haze of a cigarette.

The binocular is useful for observing a determined point; not a single movement of the enemy escapes, and the rifle fire becomes instantaneous and deadly.

In observing through a peep-hole, look through only one side of the binocular.

Organization of Fire

It is necessary to be able to fire without danger at a single determined point, and at parts of the enemy's trench outside of the marked spots.

1. In order to fire instantly at a marked spot (peep-hole of an observation post, etc.), keep a loaded rifle pointed at it all the time.

Hence, it becomes necessary to construct a rest capable of resisting the recoil of the rifle without disturbing the aim. A rudimentary rest (a sort of vise) can be built from materials to be found in the immediate vicinity of the trenches. All that is needed is two boards to form the jaws, a hinge to hold them together, a foot to which the end of one of the boards is securely nailed, and a strong bolt to close the jaws.

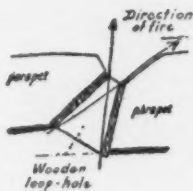


Put a piece of cloth between the jaws and the rifle.

To fire a little more to the right or left, use small wooden wedges.

A peep-hole is located beside the rest; if the lookout sees a shadow pass by the slot in the enemy's shield, a simple pressure of his finger sends a bullet straight to the mark.

Use perforating bullets against the enemy's shields, so that if you miss the slot you will be sure of hitting the enemy by penetrating the shield.



2. In order to be able to fire at an enemy who may show himself outside the limits of the spot marked down, make wooden loop-holes diagonally in the parapet, so as to be protected against shots coming from in front of you (the most frequent). These loop-holes are used without a rest.

The lookout detailed to these loop-holes is chosen from among the best shots; he watches a section of the German trenches, and if he sees an enemy suddenly show his head, he takes aim and fires.

How to Make the Enemy Show Himself

In order to enable the marksmen stationed at the loopholes to fire at the enemy, he must be made to show himself.

A number of methods of accomplishing this may be thought of:

An attack may be simulated by opening a sudden fire, shouting and firing grenades. This will make the enemy spring to his loopholes.

A cap or a hat shown from time to time in the loophole or on a level with the parapet will draw the fire of the enemy's lookout, who immediately receives several shots in his own loophole.

The earth of the parapets or the saps may be stirred about.

A number of tricks can be contrived, among others, decoy fires, at nightfall. Straw is lighted, shouts are uttered and dummy figures moved about; the enemy, without fail, will rush to his loopholes to enjoy the show and mock his adversary. When it is estimated that his loopholes are manned, fire into them.

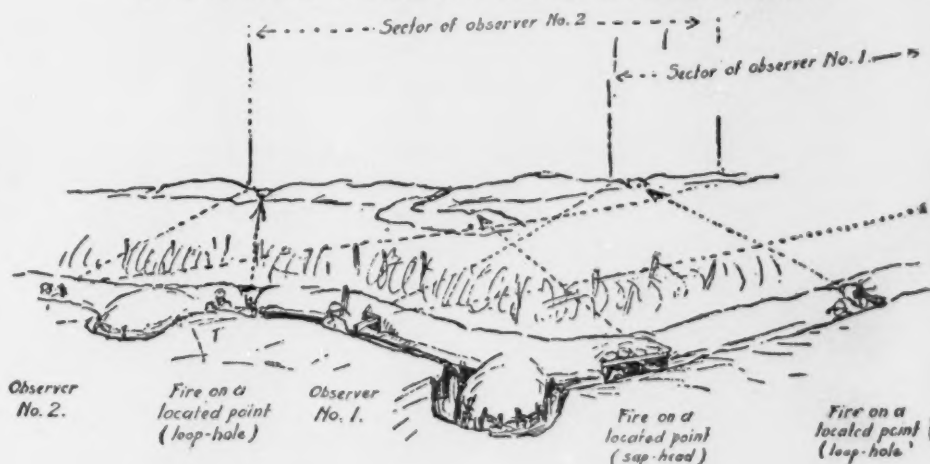
How to Use the Rifle-grenade to Inflict Daily Losses on the Enemy

There is no question but that the use of rifle-grenade is capable of inflicting greater losses upon the enemy than a bombardment.

The rifle-grenade arrives unexpectedly and without any noise; it bursts before there is time to get away from it. It is not used at fixed times, like the bombardment, and, furthermore, the enemy cannot avoid it continuously by taking refuge in his shelters. When he moves about, his mind is always under a strain to keep on the lookout. This perpetual threat makes the enemy's stay in the trench extremely trying.

Before firing grenades, it is first necessary to observe the enemy's trench closely in order to find out the places where he hangs out and where it is sometimes possible to reach him, such as shelters, sniper's posts, zig-zags, trench crossings, latrines, etc.

ORGANIZATION OF THE FIRE OF OBSERVERS IN COMBAT TRENCH



The officers indicate the direction and the approximate range of points that cannot be seen directly.

Rifles are secured in the rests facing the most important points, and a grenade fired at intervals day and night. In this way it is possible to surprise a sentry, a smoker in his shelter, a non-commissioned officer or a cook circulating in the trench.

Sometimes the enemy attempts to reply, in which case the fire must be redoubled in violence and kept up continuously. As soon

as the enemy feels that he is the weaker, he will think of nothing but getting under better cover.

In certain cases (enemy reliefs, supply parties, working parties, gathering of troops before an attack), instead of executing a slow and continuous individual fire, it is preferable to open a sudden and violent surprise fire with the greatest possible number of rifles. The firing begins with a volley and is afterwards continued at will.

When the artillery has broken down parts of the enemy's trenches and made breaches in his entanglements, he takes advantage of darkness to repair the damage. He may be considerably worried and subjected to losses by raining grenades upon the places which have been torn up during the day.

The Attack on the Trench

In case of an attack, everybody goes promptly to his battle station. Sometimes, when the attack is preceded by a violent bombardment, the station is wiped out; the trench is nothing but a mass of holes and hillocks. You must then take such shelter as you can find; a solid trench is not necessary in order to fight.

Sometimes, it also happens that the enemy succeeds in getting into your trench and pushing by before the defenders can get out of their shelters. You must not think that all is lost; make a space around the shelters with grenades and shoot the enemy in the back. By working in this way, intrepid garrisons have annihilated whole German companies which had already pushed beyond the first trench.

Protection against Asphyxiating Gases

How to foresee a gas attack.

The attack takes place in quiet weather, with a light wind.

The enemy remains quiet in the sector for several days.

From time to time, a noise of sheet iron being moved about is heard in the enemy trench.

Work may be observed going on along the whole line of the trench.

Trial balloons or smoke rising behind the enemy's lines, to show the direction of the wind, are valuable indications.

When the attack is launched, you hear a prolonged whistling sound; this is one of the only indications at night.

Measures of Protection

Always place the mask where it can be found instantly without searching for it.

When an attack is foreseen, put the goggles on your forehead and hang the mask around your neck so that you can adjust it quickly.

As soon as the attack is let loose, give the alarm; put on your goggles first, and then your mask.

Get to your battle station and open fire to prevent the enemy advancing and to break up the gas cloud.

Carry out the general instructions that have been given in advance by the non-commissioned officers.

Do not take off your mask as soon as the gas cloud has gone by, for a new one may come along.

Do not touch food that has been exposed to the gas cloud.

Never wet your mask, and do not take it out of its box unnecessarily.

The Battle

What does the infantryman do in battle?

It is always and everywhere the same thing:

After the artillery has demolished the enemy's defense and terrified the defenders, the infantryman dashes forward to the assault and clears out the position.

He pursues as far as he can in order to gain as much ground as possible at one stroke.

He sticks like a porous plaster under the fire of the big, high explosive shells, so as not to give up an inch of what he has taken.

Therefore:

Close up to within assaulting distance of the enemy (between 100 and 200 meters);

Assault;

Pursue;

Hold tight.

If not already within assaulting distance, close in on the enemy, whether by night or by day.

By day, the approach is made under cover of the artillery. You must advance smartly and not slow-up under shell fragments; the longer you stay in the rain, the wetter you get.

However, when the enemy's rifle fire becomes hot and accurate, as, for example, at close ranges, it is not possible to advance in exact alignment; you must run at top speed and keep firing in order to kill your enemies in advance.

From that moment you are no longer in formation; you can no longer hear orders in the din, and you cannot always see your leaders.

This is the time when the soldier, instead of thinking himself lost and stopping, takes the initiative with his comrades and keeps going; sometimes watching for his chance a long time, running, digging, firing, throwing grenades. This is the subject of the following pages.

The Bombardment

Raw troops are very much upset by shell fire, especially by shell of large caliber. Seasoned soldiers do not like it any better, because the din and whistling of the violent explosions confuse and addle the brain.

Seasoned soldiers, however, know that the shell often makes more noise than it does harm, and that after a terrifying bombardment everybody is not wiped out, by a long shot.

How to be Safe against Shell Fire

The heavy "soup kettle" (Marmite), which is so terrifying, is in reality only dangerous if it falls on the spot where you happen to be, because all the fragments go up in the air.

Therefore, lie down when the "soup kettle" arrives. Even if you are quite close to it, you run no risk.

Avoid getting up immediately after the explosion, especially when within 200 or 300 meters of the burst, because the pieces do not come down for a long time afterwards.

The helmet and the knapsack (with an inside padding formed by the jacket or the folded blanket) are fairly effective as a protection against shrapnel balls.

HOW TO ESCAPE SHELL FIRE

In Battle

Advance as rapidly as possible, so as to get out of the marked zones. Some men completely lose their heads, and, no longer having the strength to advance, lie face down on the ground; they will be wiped out on the spot.

Get close to the enemy. In this way the enemy heavy artillery will have to cease firing for fear of putting the shells indiscriminately among their own and our men.

When the artillery fire is violent, it causes disorder and confusion in the ranks. Each soldier has ears only for the approaching shell; he slows down, and is strongly tempted to get under cover. In this way many units break up, running pell-mell or stopping. Disorder means massacre.

Therefore, advance exactly in your place in ranks and keep in alignment. If you see anyone wavering, give him a crack with your fist and keep him in ranks.

In the Trench

Dig shelters. Do not wait till the last minute, as often happens, through indifference.

If you cannot dig deep shelters, carry the line of the trench close to the enemy under cover of darkness.

HOW TO USE YOUR RIFLE

The rifle is used to destroy the enemy at long range, so as to be able to approach him without risk. Every soldier as he advances thus clears a space ahead of him, and he has every interest in making a complete job of it.

In order to use your rifle efficiently, you must:

Take up a good position and be on the watch;

Take the point of aim of your rifle;

Keep your eye on the enemy;

Know just when to fire.

How to Post Yourself

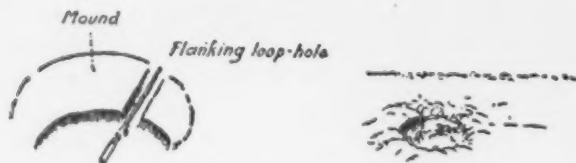
(See examples of construction of a firing post.)

In order to fire effectively, you must be sheltered. A soldier who is continually in danger of being hit is nervous in his motions; he hurries, and the enemy simply laughs at his wild shots.

The first care of the sharpshooter about to open fire should, therefore, be to construct or arrange a safe and comfortable firing post.

This will consist of an earth embankment to protect him against bullets coming from in front, and a loophole. The loophole, how-

ever, instead of being directed straight toward the enemy is arranged obliquely; consequently, fire is not opened at first upon the enemy directly opposite, but upon the adversaries more to the right.



In this way you do not run the risk of being shot in the forehead, as frequently happens when you have just arrived in a new shelter and the enemy has his eye on you. All bullets coming from the front bury themselves in the embankment without doing you the slightest harm.

Avoid disclosing your position to the enemy, for if bullets are continually striking around the rifleman, they will end by worrying him and getting his nerve. Therefore, do not change the appearance of natural cover or shelter (hummocks, tufts of grass, etc.), behind which you have stopped; hide any earth you disturb, and work cautiously in order not to attract the enemy's attention. The shelter should merge itself into the surroundings.

The rifle very often reveals the sharpshooter's post. Avoid raising the rifle in loading; slide it along the loop-hole at the level of the ground, without ever raising it.

Mask the barrel, which should never project beyond the embankment.

Take care that the discharge of the rifle does not raise any dust. To this end, arrange some bunches of grass toward the muzzle.

To take the Point of Aim of Your Rifle

The sight-settings for 200 and 400 meters are not sufficiently accurate to allow of always hitting a small object, such as the head of an enemy under cover; it is necessary to aim a little above or below the mark. Determining the point at which it is necessary to aim in order to hit the desired object is called "taking the point of aim" of the rifle. In order to do this, fire at a target the same distance away as the objective and so situated that it is easy to spot the shots (a clump of earth).

How to Keep a Lookout on the Enemy

Even at short range, the German sharpshooters are hard to make out; their position is most often indicated by the visibility of their shelter and by their rifle, as has been said before.

As soon as you have marked down an enemy, bring your rifle to your shoulder, wait till he shows himself, and fire as soon as he appears. Do not pay any attention to another until the first is put out of action. After getting rid of one adversary, pass on to the next, going from right to left. In this way you will expose yourself to frontal shots only by degrees, and as you become master of the situation.

When You Must Fire

When no enemy is in sight, watch and wait; fire only when he appears, that is to say, when he uncovers himself to fire or to advance. You will generally be warned by the raising of his rifle.

When a movement occurs, or is about to occur, in our line, the adversary does not fail to fire, and is obliged to show himself.

In firing at an enemy who is running, do not try to hit him on the fly; aim at a spot over which he must pass and fire just as he is about to reach it.

When the enemy takes flight, fire and keep firing; finally, when the enemy ought to be destroyed, he will leave only a few men on the ground. Set your sight carefully; in this way, even if you get nervous and only fire "into the brown," your fire will be murderous.

When you are hidden and the enemy advances without misgiving, hold your fire until he gets close up (to be used against patrols).

What to Fire at

The rifleman ordinarily fires at the adversary whom he has picked out in the place which has been indicated to him, but he must abandon the indicated objective on his own initiative under the following circumstances:

APPEARANCE OF NON-COMMISSIONED OFFICERS

They are recognized by their gestures, because they are generally in the center of groups, and because they are the first to start out. Fire at them to put them out of action and to make their neighborhood untenable.

ENEMY GROUP IN MOTION

Concentrate your fire on these groups.

You can tell when the enemy is preparing to make a dash by the movements occurring in his line and by the guns which stick up.

After the enemy has made a rush, keep a sharp lookout, for there are always men who have fallen behind who will try to catch up or new groups about to start.

ATTEMPT AT INFILTRATION

At times the enemy tries to creep up singly or in small groups, either running or crawling along. Watch each man as he starts out and arrives.

MACHINE GUNS

Fire immediately at every machine gun that is being mounted or which comes into action.

SIGNALLERS AND RUNNERS

Fire at any enemy making signals, as well as at every lone man moving about the field of battle, because he may be passing orders or a non-commissioned officer.

THE ENEMY PRESENTING HIS FLANK

Take advantage of every opportunity to fire into the flank of an enemy fraction. In order to do this, advance or move laterally if necessary. The fire of a single man upon the enemy flank can force a whole line to bend back.

EXAMPLES OF THE CONSTRUCTION OF A FIRING POST

In order to fire well, it is necessary to begin by using your shovel well.



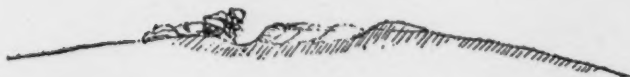
I

Skirmishers' Holes

The skirmishers help each other with the shovel, working side by side, and one digging while the other fires.

II

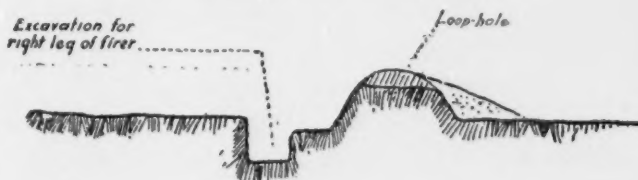
Manner of Approaching a Crest



The rifleman should not lie down directly at the summit of the crest, but should approach it very carefully by crawling. Dig behind the crest and push the earth forward until you can see the enemy (from 1 to 2).

III

Construction of a Breastwork



IV

Utilization of a Tree-Trunk



Note that this rifleman is letting the muzzle of his rifle project outside, which is incorrect.

V

Utilization of a Heap of Stones



Note that this rifleman avoids showing the muzzle of his rifle in loading.

HOW THE SKIRMISHER APPROACHES THE ENEMY

Some soldiers have only one idea: to hide themselves.

You come on the battlefield to fight. Consequently, you should make use of the accidents of the ground only for the purpose of:

Posting yourself advantageously and firing effectively.

Getting to grips with the enemy without getting yourself killed.

When to Advance

Skirmishers think that they must wait for orders before advancing; now, since the chiefs of sections are sometimes absent and often can neither be seen or heard, it happens that groups of men remain immobile for entire days.

The skirmisher should advance on his own initiative whenever he has cover a few paces, or a few dozen paces, ahead. He must always be trying to gain another inch of ground.

Difficulty of Advancing on One's Own Initiative

It is very trying to advance by short stages. When the skirmisher has gotten into a hole, he breathes; at least he is under cover. It seems to him that the whole air over his head is full of bullets; they graze him and make him flatten out still more. He has the impression that he will certainly be shot through and through if he gets up in this rain of lead.

Where is the enemy? He is not to be seen, and yet, as soon as the skirmisher shows himself, the bullets begin to smack. Those invisible but ever watchful rifles worry him and he no longer dares to venture into the open. Furthermore, the next cover seems an extraordinary distance away; his equipment weighs him down and incumbers him, he finds himself heavy and clumsy when he would like to have wings to get up and run.

Besides, the skirmisher is comfortable in his shelter and when he has fixed it up he has no idea of leaving it.

Skirmishers must not be discouraged if they experience these trying impressions. The moment of starting out is hard, but when you are on your way and running, you no longer hear the bullets whistling. However, if you stop advancing and remain hidden, *cowardice sets in*.

When Must You Advance?

In order to reach a cover that you have your eye on, you must begin by destroying or terrifying with your rifle everybody who might bother you while you are making for it.

You can dash forward without risk:

As soon as the enemy has ceased firing, or as soon as his bullets begin to pass very high. (This, however, is difficult to be sure of, because the skirmisher always thinks that the bullets are just grazing his ear.)

You can also make an unexpected dash during a lull or a let up in the fusillade; the enemy, who is no longer paying any attention, springs to his rifle and fires, but too late; however, look out for those who delay and the shots that follow.

Above all, take advantage of the moments when the enemy's position is being bombarded by your own artillery.

The Rush

Before starting, fix carefully the place where you are going to post yourself.

When the movement has not been ordered by a non-com., have an understanding with your comrades as to the starting signal, so that there will be no tardies.

Warn your neighbors to be ready to fire if the enemy appears.

Do not attract the enemy's attention by raising your rifle or standing up.

Close your cartridge pockets and secure your tool well at your belt.

Run as fast as you can during the rush.

Open out.

As soon as you arrive, arrange your cover, then enlarge it so that others can join the new line.

Infiltration

Sometimes it is possible to gain a new position without having to cross open ground.

When there is a trench which allows of reforming on a more advanced line, the skirmishers glide gradually along the trench to the new line.

If the trench is not continuous, it is completed by digging at the open parts.

Avoid with the greatest care going into a shelter one after the other, either running or crawling, when the enemy may see. The first man passes by but the second stays on the way.

PROGRESSION BY INFILTRATION



Use of the Sand-bag in Advancing

One is at times separated from the enemy by a wide stretch of open ground. In this case, it is difficult to take a position at short range from the enemy to prepare for the assault. Every man who remains motionless on open ground is quickly put out of action. Under these conditions, fill your sand-bag before leaving the last cover, before quitting the last cover, putting a few stones in the middle of the earth to better stop the bullets. The sand-bag carried under the left arm during the rush will, when you stop, give you the start of a shelter which it will be easy to complete.

THE SKIRMISHERS AT YPRES (Nov. 7, 1914)

On November 7, 1914, our attacking line had stopped 300 meters from the German trenches, from which a heavy and accurate fire was being maintained. Our men threw themselves pell-mell into the shell holes and old trenches; they were decimated and replied ineffectually to the enemy's fire, firing at random from the bottom of the shelters and accomplishing nothing beyond cutting the willow branches over the heads of the Bavarians.

Two skirmishers had succeeded in establishing themselves in a shell hole in advance of our line. One of them prepared to fire toward the flank, carefully working a loophole on the bias in the earth bordering the excavation, without changing the appearance of

the shell hole so as not to attract the enemy's attention. He then took the point of aim of his rifle and began to watch. He soon marked down an adversary well to his right, aimed at the place where he had disappeared, and waited. Each time the enemy appeared, the skirmisher got off a quick and accurate shot. In this he passed in review in succession, from right to left, all the heads that appeared. The Bavarians could not understand where the bullets were coming from, and redoubled the intensity of their fire upon the shelters where our line was huddled. Then, becoming more prudent, they took off their helmets, and no longer showed more than a corner of their eyes, but, even so, their appearance was often too long. In their turn, they cut the branches over the heads of the French, their fire slackened, and finally died out completely.

Meanwhile, the two skirmishers took turns in digging and firing, and enlarging their hole so that two more men were able to join them. The construction of the trench was continued rapidly, and finally, when the shelter was large enough, a group of non-coms and about fifteen men joined them in a rush.

Facing them, the fire from the German trench, after a few quickly suppressed attempts to reply, seemed to be smothered, silence gradually spread over this corner of the battlefield, and a lull occurred.

About noon, the group suddenly rose, and in two rushes at full speed over open ground, they reached a line of old abandoned French shelters thirty meters from the enemy. The Germans, in their surprise, fired only at the last moment wounding two men. Throughout the day, this weak group succeeded in maintaining themselves at close range from the Bavarians, who did not dare to drive them out, with a loss of only one wounded.

At night, under the protection of this group, the whole company glided forward, and dug silently, their rifles beside them with bayonets fixed. At daylight, the furious Germans could see a whole trench which had been dug under their very noses, and the points of the bayonets sticking up out of it.

This shows what can be done, almost without loss and under critical circumstances where most people would have lost their heads and given up, by the skill and audacity of, at first, two skirmishers, and then a small group.

GRENADE FIGHTING

The grenade is the weapon of the foot-soldier as well as the rifle and the bayonet.

In action you must always have grenades in your haversack and know how to handle them well.

Use of the Grenade

On the defensive, the grenade is used to establish in front of the trench a barrier which the adversary cannot get by.

In an attack, the grenade serves to drive the enemy from a trench, a shelter, a machine-gun nest, a house, or a cellar.

Preparation for an Assault by Use of the Grenade

Sometimes, in the course of action, an intrepid group succeeds in getting very close to an enemy trench; artillery preparation cannot be carried out, and assault under these conditions is dangerous. The attempt is then made to overcome the enemy with grenades, in order to attack him with the bayonet afterwards.

A few skirmishers provided with grenades try to get within throwing-distance of the enemy, by utilizing all the accidents of the ground, shell holes, and abandoned enemy trenches, and completing their path by use of the tool where necessary. If it is not possible to approach by day, they wait until darkness to creep silently into a cover very close to the enemy.

Meanwhile, the rest of the group awaits under cover the moment for the assault.

The bombers smother the enemy under a continuous hail of well-directed grenades and force him either to evacuate the place or to take refuge in his dugouts. Then is the time to assault.

The group stands-by, and fixes bayonets. At a signal, all stand up together. They dash forward without shouting, fall upon the surprised enemy, and bayonet or shoot him in his holes before he has thought of defending himself.

GRENADE FIGHTING IN A ZIGZAG OR TRENCH

At times, in the course of battle, one is obliged to progress through trenches or zigzags.

The enemy must then be driven back step by step and all the barricades he has established taken in succession by grenade fighting.

PREPARATION WITH GRENADES OF AN ASSAULT BY A GROUP OF SKIRMISHERS*



The skirmishers are then divided into three groups:

A point;

A supply chain;

A group to fill sand bags.

The point is composed of:

One man (rifleman) armed with rifle or revolver, whose sole duty is to prevent the passage of the enemy and protect the bombers.

Fight in a Zigzag

Two bombers (throwers) who throw grenades upon the enemy's barricade and upon the portion of the zigzag in rear to prevent bringing up supplies.

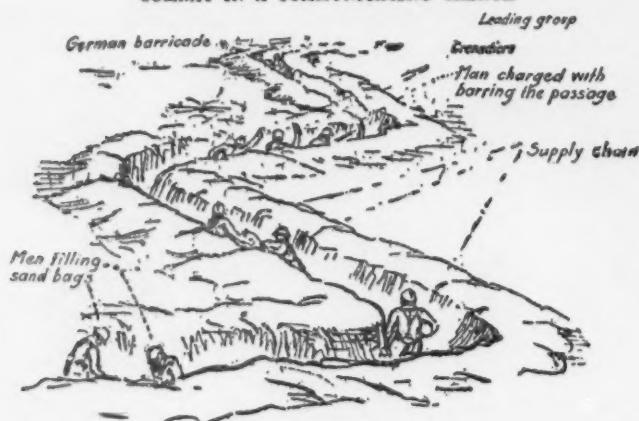
Grenade charges or Cellerier bombs thrown by hand (fused by a group in the rear) may be used to advantage in blowing up sand-bag barricades.

The supply chain is composed of a few men placed several paces apart so that they can get out of the way without bothering one another. They pass grenades in haversacks or bags.

The third group fills sand-bags so that a barricade can be quickly established. It fires rifle-grenades to interfere with the enemy's supply and to bar his lines of retreat.

The most profound silence is kept and all noises coming from the enemy are carefully noted. When the point judges that the enemy is overcome, one man crawls forward in the smoke, looks around the corner, and signals to his companions. Progress is made in this way from turn to turn and from traverse to traverse.

COMBAT IN A COMMUNICATING TRENCH



It is easy enough to protect yourself against the enemy's grenades; you see them coming, they do not burst immediately, and you have time to throw them into a corner; besides, a good many grenades fall outside the trench.

However, the formation of close groups must be avoided. When a grenade arrives, everybody squeezes together and the grenade kills all hands.

When the enemy has a momentary advantage, the sand-bag barricades must be multiplied, and the trench obstructed either by piling up the sand-bags or by tumbling in the trench walls. In this way, the enemy's advance is slowed up; he delays to clear the passage, which often gives you a chance to regain the supremacy, or else he must show himself in the open where he is exposed to the rifles.

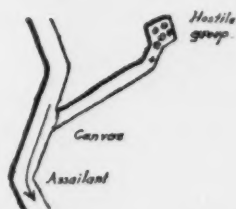
Imitate the cries of wounded men to draw the enemy into an ambushade.

Precautions to be Taken in the Fight inside the Trenches

Look out for long, straight portions of trenches; they are a snare laid for the assailant, who rushes into them thinking that he

is sheltered and gets himself massacred. These parts of the trenches are often enfiladed by rifles or by machine-guns placed in the traverses.

Likewise, you must pay attention to places where connecting trenches or zigzags cross. The enemy often retires to the bottom of a lateral branch. When the assailant advances rapidly in the zigzag, he sometimes neglects these branches which open into the side of the zigzag being followed. The enemy comes out of his hiding-place, and traps the assailant when he has passed by. The Germans sometimes mask the entrance to these refuges with a piece of canvas.



When you come to a new zigzag, throw in a few grenades; explore it, and barricade it, leaving one man on watch, if it is not considered necessary to advance by it.

The Assault, the Mêlée and the Pursuit

When a strong attacking line has succeeded in establishing itself about a hundred meters from the enemy (in order to allow the artillery to fire), and the artillery has made sufficient preparation, the assault is delivered.

The Assault

The infantry dashes forward in successive lines of skirmishers, which are called waves. Each wave leaves the trench *at a walk*; they *take their dress*, then advance at the double, making a number of rushes according to the distance. In spite of the running, of the bullets, and of those who fall, *they remain aligned like a wall to the end. It is necessary to reach the entanglements without firing a shot, so as not to delay.*

The first entanglement, if it is in existence, is crossed, and the line reformed on the far side. The line again advances; at 60 meters from the trench, charge; come to charge bayonets with one motion and spring upon the enemy.

Each man runs straight for the point of the trench which is ahead of him; watches the loopholes and the parapet, and if a head or a rifle appears, he drives it back with a shot and then leaps upon the parapet. He clears away everything that blocks his path with rifle and bayonet. *You must not leave behind you anyone who may shoot you in the back*, as has often happened. Make sure that the Germans lying at the bottom of the trench are really dead.

THE CHARGE



If all the enemy surrender at once, do not massacre them, but disarm them quickly. Men detailed in advance and the trench clearers alone look out for prisoners, because skulkers are in the habit of showing great readiness to gather in the prisoners they have not captured.

MACHINE GUNS

A machine gun opening fire should become the target for all hands; it must be subjected to a hail of bullets.

The Mêlée in the Enemy's Position and the Pursuit

The trench, cleared of its defenders in a few seconds, is crossed *without stopping*; the assaulting force *lies down 10 meters beyond it* and opens fire on the second trench. The line being reformed, it again takes up the assault, in careful alignment as at first.

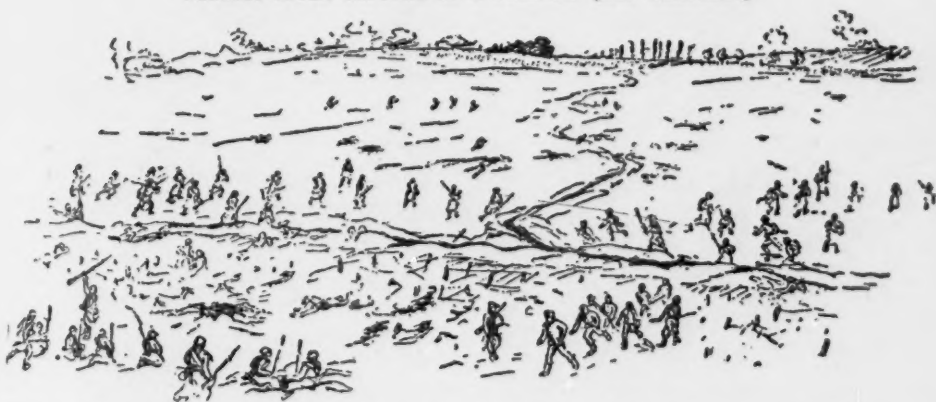
It is absolutely forbidden to enter the zigzags; it is a great temptation, but you never come out of them again, and a handful of men will stop the progress of a company for hours. Men detailed in advance follow the zigzags according to a fixed itinerary and prevent the enemy from enfilading the space between two trenches.

The violence of the assault creates great disorder among the enemy, who does not know who is holding out and who has fallen.

Advantage must be taken of this confusion *to go as far as possible*; if there is any delay, the barrier fire will soon be started.

However, the men *must not go out in disorder, singly, like maniacs*; they would be at the mercy of the slightest fusilade or the least counter-offensive.

PURSUIT AFTER CAPTURE OF A POSITION (ALL TRENCHES)



Rally while marching in line of skirmishers, behind the noncommissioned officers of the company. The different waves separate and re-form. Patrols protect the movement.

Hence:

Always rally about the company non-coms;

Reform a line of skirmishers while on the march;

Advance quickly on the heels of the adversary, in good order, keeping a sharp lookout, and the rifle ready.

Certain men are detailed to crawl rapidly in advance; they cover the rally and the advance of the lines of skirmishers. It is their duty to seize important points (crossings of the zigzags, etc.), whose occupation will prevent the arrival of reinforcements and cut off the retreat of certain groups of defenders.

Every soldier should be well acquainted with the plan of the enemy's trenches; he must be able to head for such and such a shelter, such and such a machine gun, or such and such trench crossing.

WHERE TO TAKE INFORMATION

Before starting out, every soldier must know exactly where he will surely find some one who will quickly stop the fire of his artillery when it is firing short, or cause it to commence firing when the occasion presents itself.

Failings Which Every Soldier Must Prevent

During the *melée* and the pursuit, a certain amount of confusion sometimes occurs among the assaulting troops. A small number of bad soldiers is enough to cause disorder.

The timid spread alarm by shouting: "They are coming back . . . asphyxiating gases . . . the company is wiped out . . . all the officers are killed . . . we are trapped."

These men *must be made to keep still*; if they fall back, *jump on them and make them advance*, to avoid a panic.

Skulkers profit by the confusion and the disappearance of the leaders to stay hidden in rear under some pretext or other; they are anxious to accompany the wounded or prisoners, pretend to be putting the trench in a state of defense or say that they were lost. All these people will be picked up by the police details.

Enemy Counter-attacks and Flanking Fire

Scattered groups of skirmishers *have a tendency to retreat* precipitately before the slightest counter-attack or when *subjected to flanking fire*, because their leaders have fallen, and because they are few in number and are afraid of being surrounded. A single soldier who falls back is enough to carry the others with him.

Ground which has been gained is to be bitterly defended; *you must not retreat*. When there are no officers or non-coms left, there are still intrepid soldiers to stop those who tremble, and shout at them: "I'll kill the first man who hesitates." Isolated groups of skirmishers should entrench themselves in the corner of a trench; if they are surrounded, they must defend themselves to the last cartridge, and then use German rifles and cartridges.

FOUR RESOLUTE MEN UNDER COVER, WHO FIRE ONLY WHEN SURE OF A HIT, ARE ABSOLUTELY UNAPPROACHABLE.

CONTINUED DISCUSSION ON MARINE CORPS WAR COLLEGE¹

MAJ. ARTHUR T. MARIX, U. S. MARINE CORPS

I have read Colonel Fuller's article in the *GAZETTE*, in which he strongly advocates the creation of a Marine Officers' School for the study of important questions pertaining exclusively to the duties of marine officers when commanding an advance base, or an expeditionary force occupying foreign territory.

I agree with Colonel Fuller in believing that we should have such a school, but I differ with those able thinkers in the Corps who believe in the policy of maintaining advance base regiments *exclusively as such*. I would much prefer to see an organization composed of a brigade of infantry, reinforced by one battalion of signal troops (2 companies), one battalion of mountain artillery, one mine company, two companies of infantry trained for both pioneer and cavalry work, and carrying complete cavalry equipment (except horses which could be obtained when landed in a foreign country), and a sufficient detail of quartermaster and commissary sergeants, together with all necessary clerks to perform their work without disrupting company, battalion or regimental organizations by calling upon them for men to perform such duties outside of their own organization.

You may ask the question, "Why have you not included in your tentative organization of a reinforced brigade, one or more companies capable of handling 5-inch guns required in advance base work?" To this I reply: The battalion of mountain artillery should be thoroughly trained in the handling, placing, etc., of such guns, and be called upon to man them when our work requires it, for mountain guns and those of 5-inch caliber will never be needed at the same time or on the same expedition.

After all, 95 per cent of our duty in the field is not advance base work, but the quelling of disorders and revolutions in Latin-American countries. It is for such work that we should be equipped, primarily; for advance base work, secondarily. Assuming for the

¹Col. Ben. H. Fuller, U. S. Marine Corps, in the December *GAZETTE*, page 359.

moment that I am right in my supposition, it then goes to prove that the paramount duty for which we should prepare is not advance base work, but such combat work as may fall to our lot in Latin-American countries, and that in conjunction with the Army. If such is the case, I strongly advocate, first, the graduating of as many officers as we can from the Army School of the Line at Fort Leavenworth, and, secondarily, the establishing, as Colonel Fuller suggests, of a school for the instruction of marine officers along a well-defined "system of things that belongs to us exclusively."

It takes years of time to perfect a school to such a high state of efficiency as the Army Service Schools. The reservation upon which these schools are located comprises hundreds of acres, of a diversified terrain, for the instruction of officers in various problems in troop maneuvers, troop leading, and field engineering and fortifications; the last two under officers specially trained in engineering. Problems in cavalry work are conducted by the Army's most able instructors along that line. Instruction in International Law, Criminal Law, the Rules of Land Warfare, Elements of Law and the Law of Evidence is in the hands of officers who have graduated in such studies.

I have had the honor of attending the Army School of the Line and know whereof I speak when I say that I believe there is no better instruction to be had for marine officers, at any school in the world, than can be obtained there. Our work in the future, as formerly, will frequently throw us with the Army, or, at least, along the same line of work as they perform; but whether working in conjunction with them or alone, the nature of our work is such that we should first take advantage of the benefits to be obtained by a course at that school. I would even go so far as to say that, in my opinion, no major in the Marine Corps should be promoted unless he holds a certificate of graduation from the Army School of the Line.

In order that we may obtain the Army's consent to send at least six majors a year to their school, it might be well to offer them the services of one of our graduates from the school for duty on their staff of instructors. The Army is sorely pressed for sufficient instructors and I believe that several of our graduates are well qualified as such, and one would make a welcome addition to the Army's staff.

As living quarters at Fort Leavenworth, for officers attending

the school, arrangements should be made by our Corps to erect a building on the reservation which would suitably quarter any officers we might send there. It is a great hardship for any officer to be obliged to live in town (3 miles away from the school) when one must be in the conference room by 8 o'clock in the morning. Just living in the atmosphere of the school is, in itself, of great assistance to the student.

In selecting our majors for this school, the detail should be made from the seniors, working down the list yearly from number one to the junior.

Having graduated a number of majors from the Leavenworth school, excellent material would then be available for instructors in a school of our own (which should be presided over by a colonel); these officers to be selected from those who have special ability in imparting to others the knowledge gained by them, not only that acquired at Fort Leavenworth, but also in the various subjects set forth by Colonel Fuller in his article, and who would, thereby, be specially fitted to instruct marine officers in the various duties required of them when serving with expeditionary forces in foreign tropical countries. Officers for instruction at this school should be selected from the captain's grade, commencing with the senior and following down the list in numerical order.

MAJ. JOHN C. BEAUMONT, U. S. MARINE CORPS

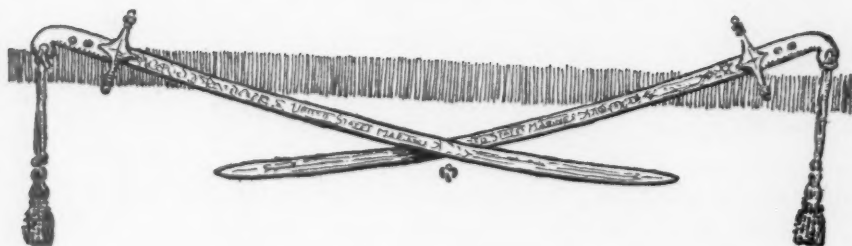
Colonel Fuller's article suggesting the establishment of a Marine Corps College where opportunity for acquiring knowledge of some of the important duties can be obtained, is certainly a sound one and one which should be given careful consideration.

There are numerous important duties performed by our service, about which an officer, unless he has had actual experience, has no means by which he can familiarize himself except to a very small degree. Their performance cannot be learned at the schools or colleges of the Army and Navy, and there is practically no accessible data available bearing on the subjects involved in these duties.

The importance of having marine officers attend the War Colleges of the Army and Navy and the other Army Schools cannot be questioned, and as many officers as can be spared should be sent each year. This, however, would not in any way interfere with the maintenance of a Marine Corps College where a course of study can

be had on subjects pertaining strictly to the work performed by the Marine Corps, such as expeditionary and advance base work. All data relating to the operations of previous expeditionary and advance base forces should be compiled and put in proper form for that purpose. This course would include a thorough study of the geography, topography and resources of all countries in which an expeditionary or advance base force would likely operate. The length of the course would not require a longer period than four months, and it should be for eld officers only. The methods used should be similar to those in vogue at the Naval War College.

A Marine Corps College of this nature would prove of greater value than we can at present realize, since it would, to a very great extent, eliminate the probable repetition of mistakes and blunders which may have been made in the past, and assure greater efficiency in the future.



THE LONE CHARGE OF WILLIAM B. PERKINS

STEPHEN CRANE

This story of Guantanamo is reprinted from "Wounds in the Rain," by the late Stephen Crane. This volume is out of print, but through the courtesy of the Frederick A. Stokes Company the GAZETTE is able to reproduce the story, which was one of the first that brought to Stephen Crane his recognition as one of the foremost American writers.

HE could not distinguish between a 5-inch quick-firing gun and a nickel-plated ice-pick, and so, naturally, he had been selected to fill the position of war-correspondent. The responsible party was the editor of the *Minnesota Herald*. Perkins had no information of war, and no particular rapidity of mind for acquiring it, but he had that rank and fibrous quality of courage which springs from the thick soil of Western America.

It was morning in Guantanamo Bay. If the marines encamped on the hill had had time to turn their gaze seaward, they might have seen a small newspaper despatch-boat wending its way toward the entrance of the harbor over the blue, sunlit waters of the Caribbean. In the stern of this tug Perkins was seated upon some coal bags, while the breeze gently ruffled his greasy pajamas. He was staring at a brown line of entrenchments surmounted by a flag, which was Camp McCalla. In the harbor were anchored two or three grim, grey cruisers and a transport. As the tug steamed up the radiant channel, Perkins could see men moving on shore near the charred ruins of a village. Perkins was deeply moved; here already was more war than he had ever known in Minnesota. Presently he, clothed in the essential garments of a war-correspondent, was rowed to the sandy beach. Marines in yellow linen were handling an ammunition supply. They paid no attention to the visitor, being morose from the inconveniences of two days and nights of fighting. Perkins toiled up the zigzag path to the top of the hill, and looked with eager eyes at the trenches, the field-pieces, the funny little Colts, the flag, the grim marines lying wearily on their arms. And still more, he looked through the clear air over 1,000 yards of mysterious woods from which emanated at inopportune times repeated flocks of Mauser bullets.

Perkins was delighted. He was filled with admiration for these jaded and smoky men who lay so quietly in the trenches waiting for a resumption of guerilla enterprise. But he wished they would heed him. He wanted to talk about it. Save for sharp inquiring glances, no one acknowledged his existence.

Finally he approached two young lieutenants, and in his innocent western way he asked them if they would like a drink. The effect on the two lieutenants was immediate and astonishing. With one voice they answered, "Yes, we would." Perkins almost wept with joy at this amiable response, and he exclaimed that he would immediately board the tug and bring off a bottle of Scotch. This attracted the officers, and in a burst of confidence one explained that there had not been a drop in camp. Perkins lunged down the hill, and fled to his boat, where in his exuberance he engaged in a preliminary altercation with some whiskey. Consequently he toiled again up the hill in the blasting sun with his enthusiasm in no ways abated. The parched officers were very gracious, and such was the state of mind of Perkins that he did not note properly how serious and solemn was his engagement with the whiskey. And because of this fact, and because of his antecedents, there happened the lone charge of William B. Perkins.

Now, as Perkins went down the hill, something happened. A private in those high trenches found that a cartridge was clogged in his rifle. It then becomes necessary with most kinds of rifles to explode the cartridge. The private took the rifle to the captain and explained the case. But it would not do in that camp to fire a rifle for mechanical purposes and without warning, because the eloquent sound would bring six hundred tired marines to tension and high expectancy. So the captain turned, and in a loud voice announced to the camp that he found it necessary to shoot into the air. The communication rang sharply from voice to voice. Then the captain raised the weapon and fired. Whereupon—and whereupon—a large line of guerillas lying in the bushes decided swiftly that their presence and position were discovered, and swiftly they volleyed.

In a moment the woods and the hills were alive with the crack and sputter of rifles. Men on the warships in the harbor heard the old familiar flut-flut-fluttery-fluttery-flut-flut-flut from the entrenchments. Incidentally the launch of the *Marblehead*, commanded by one of our headlong American ensigns, streaked for the strategic

woods like a galloping marine dragoon, peppering away with its blunderbuss in the bow.

Perkins had arrived at the foot of the hill, where began the arrangement of 150 marines that protected the short line of communication between the main body and the beach. These men had all swarmed into line behind fortifications improvised from the boxes of provisions. And to them were gathered naked men who had been bathing, naked men who arrayed themselves speedily in cartridge belts and rifles. The woods and the hills went flut-flut-fluttery-fluttery-flut-fluttery-flut. Under the boughs of a beautiful tree lay five wounded men thinking vividly.

And now it befell Perkins to discover a Spaniard in the bush. The distance was some five hundred yards. In a loud voice he announced his perception. He also declared hoarsely, that if he had a rifle, he would go and possess himself of this particular enemy. Immediately an amiable lad shot in the arm said: "Well, take mine." Perkins thus acquired a rifle and a clip of five cartridges.

"Come on!" he shouted. This part of the battalion was lying very tight, not yet being engaged, but not knowing when the business would swirl around to them.

To Perkins they replied with a roar. "Come back here, you — fool. Do you want to get shot by your own crowd? Come back, — —!" As a detail, it might be mentioned that the fire from a part of the hill swept the journey upon which Perkins had started.

Now behold the solitary Perkins adrift in the storm of fighting, even as a champagne jacket of straw is lost in a great surf. He found it out quickly. Four seconds elapsed before he discovered that he was an almshouse idiot plunging through hot, crackling thickets on a June morning in Cuba. Sss-s-swing-sing-ing-pop went the lightning-swift metal grasshoppers over him and beside him. The beauties of rural Minnesota illumined his conscience with the gold of lazy corn, with the sleeping green of meadows, with the cathedral gloom of pine forests. Sshsh-swing-pop! Perkins decided that if he cared to extract himself from a tangle of imbecility he must shoot. It was necessary that he should shoot. Nothing would save him but shooting. It is a law that men thus decide when the waters of battle close over their minds. So with a prayer that the Americans would not hit him in the back nor the

left side, and that the Spaniards would not hit him in the front, he knelt like a suppliant alone in the desert of chapparel, and emptied his magazine at his Spaniard before he discovered that his Spaniard was a bit of dried palm branch.

Then Perkins flurried like a fish. His reason for being was a Spaniard in the bush. When the Spaniard turned into a dried palm branch, he could no longer furnish himself with one adequate reason.

Then did he dream frantically of some anthracite hiding-place, some profound dungeon of peace where blind mules live placidly chewing the far-gathered hay.

"Sss-swing-win-pop! Prut-prut-prrrut!" Then a field-gun spoke. "Boom-ra-swow-ow-ow-ow-pum." Then a Colt automatic began to bark. "Crack-crk-crk-crk-crk-crk" endlessly. Raked, enfiladed, flanked, surrounded, and overwhelmed, what hope was there for William B. Perkins, of the *Minnesota Herald*?

But war is a spirit. War provides for those that it loves. It provides sometimes death and sometimes a singular and incredible safety. There were few ways in which it was possible to preserve Perkins. One way was by means of a steam-boiler.

Perkins espied near him an old, rusty steam-boiler lying in the bushes. War only knows how it was there, but there it was, a temple shining resplendent with safety. With a moan of haste, Perkins flung himself through that hole which expressed the absence of the steam-pipe.

Then ensconced in his boiler, Perkins comfortably listened to the ring of a fight which seemed to be in the air above him. Sometimes bullets struck their strong, swift blow against the boiler's sides, but none entered to interfere with Perkin's rest.

Time passed. The fight, short anyhow, dwindled to prut. . . . prut . . . prut-prut . . . prut. And when the silence came, Perkins might have been seen cautiously protruding from the boiler. Presently he strolled back toward the marine lines with his hat not able to fit his head for the new bumps of wisdom that were on it.

The marines, with an annoyed air, were settling down again when an apparitional figure came from the bushes. There was great excitement.

"It's that crazy man," they shouted, and as he drew near they gathered tumultuously about him and demanded to know how he had accomplished it.

Perkins made a gesture, the gesture of a man escaping from an unintentional mud-bath, the gesture of a man coming out of battle, and then he told them.

The incredulity was immediate and general. "Yes, you did! What? In an old boiler? An old boiler? Out in that brush? Well, we guess not." They did not believe him until two days later, when a patrol happened to find the rusty boiler, relic of some curious transaction in the ruin of the Cuban sugar industry. The patrol then marvelled at the truthfulness of war-correspondents until they were almost blind.

Soon after his adventure Perkins boarded the tug, wearing a countenance of poignant thoughtfulness.



SHORT RANGE BATTLE PRACTICE RESULTS

THROUGH the courtesy of the Director of Gunnery Exercises and Engineering Performances, and the Chief of the Bureau of Naval Operations, the following table showing the scores made by the Marine Detachments in the recent Short Range Battle Practice, arranged by calibers, is made available to the Marine Corps through the medium of the GAZETTE:

7-inch, 45-caliber. (Number competing, eight)

Stand- ing	Division Officer Junior Division Officer	Rank	Vessel	Merit
3	Owens, A. B.....	Capt., M. C.....	Minnesota.....	37.400
	Underhill, J. C.....	2d Lieut., M. C.		
4	Lay, H. R.....	Capt., M. C.....	Vermont.....	37.000
	Stephenson, L. E....	2d Lieut., M. C.		

5-inch, 51-caliber. (Number competing, twenty-nine)

1	Wirgman, H. F.....	Capt., M. C.....	Pennsylvania...	78.335
	Messersmith, R. E...	1st Lieut., M. C.		
6	Turner, T. C.....	Capt., M. C.....	Texas.....	55.168
9	Bishop, G.....	Capt., M. C.....	New York.....	51.501
	Thatcher, M. R.....	1st Lieut., M. C.		
10	Kipp, H. H.....	Capt., M. C.....	Arkansas.....	51.168
	Hamilton, G. W.....	2d Lieut., M. C.		
11	Lee, S. S.....	1st Lieut., M. C...	Florida.....	43.001
	Rupertus, W. H.....	2d Lieut., M. C.		
16	Sibley, B. W.....	Capt., M. C.....	Wyoming.....	37.667
	Tebbs, R. H.....	1st Lieut., M. C.		
17	Watson, A. M.....	Capt., M. C.....	Oklahoma.....	36.167
	Schmidt, H.....	1st Lieut., M. C.		
22	Lyman, C. H.....	Capt., M. C.....	Nevada.....	32.501
	Johnson, G. A.....	1st Lieut., M. C.		
27	Hughes, J. A.....	Capt., M. C.....	Delaware.....	20.000
	Kingman, M. H.....	2d Lieut., M. C.		
29	Taylor, C. B.....	Capt., M. C.....	Utah.....	11.500

SHORT RANGE BATTLE PRACTICE RESULTS 77

3-inch, 50-caliber, semi-automatic. (Number competing, fifteen)

Stand- ing	Division Officer Junior Division Officer	Rank	Vessel	Merit
1	Waller, L. W. T.....	1st Lieut., M. C...	Michigan.....	40.866
	Foster, J. C.....	2d Lieut., M. C.		
8	Potts, J.....	1st Lieut., M. C...	South Carolina..	21.325
	Mayer, J. L.....	2d Lieut., M. C.		
10	Capron, P. A.....	1st Lieut., M. C...	Kansas.....	20.305
	Norris, J. F. S.....	2d Lieut., M. C.		
11	Bogan, W. S.....	Capt., M. C.....	New Hampshire.	19.286
	Marmion, P. C.....	2d Lieut., M. C.		

3-inch, 50-caliber, rapid-fire. (Number competing, five)

4	Lay, H. R..... Stephenson, L. B....	Capt., M. C..... 2d Lieut., M. C.	Vermont.....	8.612
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THE NEW HOSPITAL WARD TENT

CAPT S. W. BOGAN, U. S. MARINE CORPS

WHILE at the National Rifle Matches of 1916, at Jacksonville, Florida, I became very much interested in a part of the equipment of the First Field Hospital, Florida National Guard. This special feature, the new hospital ward tent, impressed me as being worthy of consideration as an important addition or change in the camping and expeditionary equipment for the Marine Corps.

This tent, upon the recommendation of the Surgeon General of the Army, was manufactured by the Quartermaster Department, and was first issued for use in 1913, to the Field Hospital Company No. 3, at the Mobilization Camp, Texas City, and later was used at Vera Cruz by the same company.

During 1912, the ward tent was under experimentation at Washington, D. C., and was favorably reported upon after a test of four months. It also had a thorough test in Texas, and it was found just as cool in hot weather and comfortable in cold as the regulation hospital tent.

Although this tent has been designed for hospital service, its many advantages give it an additional superiority in the quartering of troops over the wall tents now carried by the Marine Corps.

A brief description will suffice to show the simplicity of this tent. It is made of regulation olive drab canvas, with a length of about 40 feet along the crest and a total length of 50 feet. It has a width of 16 feet and is 10 feet high at the ridge and $4\frac{1}{2}$ feet in height at the sides and ends. The walls are laced at the corners to permit the easy rolling up of the sides. At each end there is a door which can be closed by a lapping flap of canvas.

The junction of the top and walls and also the crest is reinforced with $1\frac{1}{4}$ -inch rope—stopped with heavy marlin—which takes up the supporting and guy strains. No ridge poles are necessary, the supports being four regulation hospital tent poles, placed 10 feet apart, the upper ends projecting through four openings in the top of the tent. These openings or vents, are about 14 inches in diameter, and the rope reinforcing around each is made fast to a steel ring,

which carries four stout chains, 16 inches long and at equal distances apart.

The other ends of these chains are made fast to a steel disk, about 3 inches in diameter. In the center of this disk is a hole sufficiently large to admit the iron pin in the end of the upright.

The short guy ropes are of $\frac{3}{8}$ -inch line, and are so made fast that their strain is taken up by the reinforcing ropes on the sides and ends.

The four top vents can be closed during inclement weather by means of small canvas hoods around the suspension chains.

The chains with the disk attached allow the tent freedom to swing independently of the uprights, eliminating the rubbing and wearing of the canvas which takes place when ridge poles are used.

There is no fly furnished with this tent as it has been deemed entirely unnecessary, thereby reducing the weight and bulk.

Twenty-four cots arranged in two rows with ample space between cots, can be comfortably housed within one of these tents, allowing also for a passage-way between the rows. To obtain the same degree of comfort and space, twelve wall tents would be necessary to accommodate the same number of men. The weight of twelve wall tents complete would be 1,164 pounds, while the ward tent, without the four poles, weighs about 535 pounds, or a saving in weight of approximately 50 per cent.

Of course more men can be housed in this tent in case of necessity. As many as fifty patients have been cared for where the cots have been discarded and straw and blankets substituted for beds, the heads toward the passage-way and the equipment placed at the feet. Seventy-five men have been accommodated with the beds arranged in three rows with passages between, the side walls raised so as to form an extension of the top. The bottoms of the walls are made fast to the side guys.

The marine detachments aboard ship consisting of sixty-five to seventy men, can be comfortably housed and taken care of with four of these tents. Two tents would be used as living quarters, one tent for cooking and messing or messing alone, and one tent for officers and stores. One or two wall tents additional could be carried for use as a kitchen, tool and store tent as circumstances required. For this as a sample the cost would approximate about one-half that of the present equipment now carried by ship's detachments.

Ordinarily it will require eight men to pitch this tent, although six men can do it. It will take this same number of men from ten to thirty minutes to erect the tent according to the weather and ground conditions.

Although it is more commodious than three regular hospital tents, having 96 more square feet of floor space, it requires considerably less canvas and can be purchased at a correspondingly reduced cost, the price per tent being \$120.76. Twelve wall tents with flies would cost \$273.12.

For the photographs and much of the subject matter I am greatly indebted to Maj. Raymond C. Turck, Medical Corps, First Field Hospital, Florida National Guard.



BOOK REVIEWS

The Possible Peace: A Forecast of World Politics after the Great War,
by Roland Hugins. The Century Company, New York. 189 pages.
\$1.25 net.

Departing from the visionary view of preparedness, and the causes of war shared by fellow pacifists, the author has presented a striking work, viewing the road to a possible peace with a hard-headed, sane outlook. Yet his prominence as a pacifist lends to Mr. Hugins' words a coloring that should be of real interest to the service, without at the same time barring that interest by presenting pacifist theories based on the threadbare arguments so popular with his school of thought. While in England in the summer of 1914 attending a peace conference, Mr. Hugins confessed to the common belief of pacifists that another great war was impossible. David Starr Jordan, Norman Angell and other leading pacifists had at that time demonstrated to their own satisfaction that war between the powers was impossible, yet a month later Europe was plunged into its greatest conflict.

Early in his book the author states, with refreshing candor, that while the war will, in the long run, strengthen the cause of international peace, it has so far served to discredit the professional peace advocate. The world has not collapsed, he concludes, but only the pacifist's world. As Waterloo is now an historical incident, so the Great War will rank in 50 or 100 years. The natural sequel, he believes, will be other wars, due, in part, to the issues created by this one, and in part to the deep-lying causes that made this and other wars possible, despite the hope of what he terms the incurable optimists.

In support of his belief that war will be always with us, he quotes Israel Zangwill:

"No generation likes to die without seeing this famous thing—war—with its own eyes. Every generation must have its own war, and so the latest date for the next war is fixed by the life of the generation now being born."

Taking up the widespread statement that this was not a people's war, he points out that in Europe, "a vigorous foreign policy"

has been popular in nearly all nations. As the German people have an unusual pride in their army, Britain has the same in its fleet, and the French, in elections directly preceding the war, voted to increase the service with the colors to three years.

In his chapter on "War for War's Sake," the author holds that pacifists have scotched the doctrine that war is an agency for racial progress and that this war has exposed the fallacies of the arguments of the German philosophers, Nietzsche, Treitschke and General Bernhardt, who were the most forceful and candid in the advocacy of the doctrine. He finds that only the weak, diseased and cowardly are left behind to breed the next generation. War, instead of promoting the stock, is as great an agency for destroying it as vice.

"The tragedies of armed conflict," he finds, "are not hallowed simply because naval cadets experience thrills when they pledge the king, or because junior officers find lumps in their throats when they take the oath on the swords."

He concedes that militarists are right when they insist that there are things worth fighting for, and that the ordinary man will continue to fight for defense, or for chivalry.

The hopes of peace advocates are concentrated about one of three doctrines, according to the author: a world court; a league to enforce peace; a federal council where laws can be made and national grievances removed by legislation. The first must confine itself to minor dissensions, he contends, and in its present mood the United States would not submit to arbitration the Monroe Doctrine, England the retention of Egypt, Germany the Kiel Canal, nor Russia the liberty of Finland. The refusal to arbitrate these major matters wrecks the idea of a predominant world court.

Taking up a league to enforce peace he first considers the use of an international police force to clean up areas of anarchy like China or Mexico, but its main function would be to restrain aggression. It might be a definite unit contributed by the armies and navies of the powers under international leadership. On the other hand it might be an agreement for the joint use of their forces; a league to enforce peace.

Peace through compulsion, in his opinion, would achieve neither peace nor justice. By what rule, he asks, would the aggressor be known. The Boers declared war on Great Britain, yet the world

does not think of the Boer as the aggressor. Japan and Russia came to blows without a formal declaration of war by either power. Against which side, he asks, would a league have intervened? The temptation to internal manipulation, he concludes, would prove the greatest danger to such a league.

As to the idea of a federal council it would matter little whether it was a regular chamber of deputies or a few men meeting periodically around a green table. No international legislation, in the author's view, could be carried through unless undertaken in good will. The Algeiras conference of 1906 is cited to show how bad faith shattered this attempt at international rule. Following up this line of argument, Mr. Hugins claims that the European powers cannot hope for a binding alliance without the substratum of confidence and good-will.

Wars will not cease until the desire for war passes, and aversion to war will not end it, he declares, for the horror of war does not survive from one generation to another.

A striking passage in the chapter, "The Politics of Peace," is well worth quoting:

"Every nation is a Dr. Jekyll and Mr. Hyde. Two natures struggle within it: the militarist and the pacifist, the reactionary and the constructive. At the extreme of the peace-preferring wing stand the pacifists, the organized laborers and Social Democrats, and a considerable section of the intellectual classes. At the extreme of the war-preferring wing are the armament interests, the Junkers and Tories, the officers of the army, and the newspaper Chauvinists. Between the two stand large classes, farmers, business men, clerks, professional men, many laborers—in short, the mass of the nation. We do not know precisely the relative strength of these divisions. At present the peace-preferring groups appear to be in the majority, the militaristic groups in control. The practical problem of the pacifist is so to strengthen, in each country, the peace-preferring groups that they may carry the mass of the nation, thinking and unthinking, with them."

In an interesting chapter, devoted to a study of the national temper of each of the leading powers, the author leans to the view

that the super-war may follow the present one if Russia, as the center of a combination, including Japan and Germany, should aim to dominate Asia. The excellence of the Japanese soldier he attributes, in this chapter, to his identification of patriotism with religion.

In the concluding chapter, "Double-Barrelled Preparedness," Mr. Hugins comes out forcefully for adequate preparedness on a scale that many in the service would be glad to accept. First, taking up the subject of the agitation for preparedness, he thinks that the two sides, the one for and the other against preparedness, are not so far apart as they think. One wishes to protect American interests by an adequate armed force, while the other wishes a clear understanding of what those interests are. To him it is obvious that in event of war with a first-class power our present forces would make an insufficient first line of defense for 100,000,000 people. "We have outgrown the myth of the minute man. We can place no reliance on the million patriots who will spring to arms between sunset and dawn." As to the danger of such a war, Mr. Hugins does not believe that it will rise from any specific quarrel now brewing, but rather from the general international situation. If the imperialistic struggle should shift from the Mediterranean to the Far East, then the Philippines, the Panama Canal and our trade in China would make our position more critical.

Greater stress is laid on what follows than is given by the author to any other part of his clear and interesting theories: that the greatest contribution the United States could make to the cause of international peace would be a "straightforward and unambiguous" statement of its foreign policy, drafted and approved by Congress and signed by the President, outlining a stand against entangling alliances, readiness to become a party to any international organization planning to lessen wars, if recruited on the broadest international basis; to maintain the Monroe Doctrine; reserve the right to regulation of our immigration and our tariffs with due regards to other nations; to fight only when the unmistakable rights of American citizens are invaded; and making clear our purpose not to acquire territory by conquest or coercion.

He brings his intensely interesting work to a close by stating that good sense and an analysis of the international situation prompt us to prepare with an adequate army and navy.

"What the United States needs, at the minimum, is a regular army of 400,000, with short-term enlistments and a growing body of reserves, and a navy second only to Great Britain's. England has announced the two-power standard. We should announce the 80 per cent standard."

That the purpose of the army and navy is not to preserve peace, but to win in war is his view of the situation, a rather novel one for an avowed pacifist, but he takes a stand against universal military service on the ground that it would create, through its officers, a lobby for war.

The Epic of Dixmude, by Charles Le Goffic. Brentano, New York. 154 pages. \$1.00 net.

The Epic of Dixmude ranks high among the war's literature, and is of additional interest as it is the story of the heroic defense by the French Marines who, for a month, outnumbered at the ratio of six to one, held out in a bombarded town of Belgium, where it was no longer light or dark, "but only red." While to the layman the term of marine as understood in France, and in our service, would appear to be synonymous, the Marines of Dixmude were in reality a Breton sailor brigade. The French colonial infantryman is much more like our own organization in its duties and training.

After Dixmude, which placed its defending marines high among the heroes of France, this sailor brigade was kept up to the strength of two regiments and distributed for service at Ypres and Saint Georges. As General Joffre himself said at the close of the battle of the Yser, a victory second then only to that of the Marne: "You are my best infantrymen."

Rear Admiral Ronarc'h, who had attained that rank in the French Navy at the age of forty-nine, had one week in which to form a brigade of six thousand rank and file on the footing of two regiments, each of six battalions and one machine-gun company. The law permitted the surplus men of the Navy to be used in the field and he insisted that his be a separate unit. Ronarc'h was in the Seymour column, which started to the relief of Peking, and his historian claims that his was the only detachment to bring off its guns in that retreat.

He and his newly formed brigade lay idle during the Battle of

the Marne. Following it he was ordered to Dunkirk, then unmenaced, but en route was diverted to Antwerp. Before his brigade arrived the troops defending Antwerp were withdrawing with the exception of a Belgian division of the Royal Naval Brigade and six thousand Naval Reserve volunteers. He was ordered to cooperate with the Ghent garrison and the expected English reinforcements.

The brigade of Breton sailors, the majority of them young apprentices from the five ports of Brittany which supply the French Navy with four-fifths of its men, the rest recruits or old veterans, met its baptism of fire at Melle and came out the victors of that engagement. Here it came under the command of General Capers' Seventh British Division. The only part of the naval uniform that Ronarc'h had retained was the pom-pom cap with its red tassel.

By short marches the Belgian Army fell back to the Yser, where the French Marines joined it. Dixmude was their destination, and there they entrenched and organized the defenses about Dixmude. They barred the German road to Dunkirk for a month, ensuring the safety of the Belgian Army and allowing the Allies to concentrate behind the Yser. But through that month no hope of reinforcements was held out to Ronarc'h's brigade. His only orders were "to hold on." With his six thousand sailors and five thousand Belgians he faced the task of barring the road to three German army corps. The infantry had motorcycles, but the force had no planes and little artillery.

The study of the defense of Dixmude reveals a stirring story of brave resistance, but little of military value. The trenches and obstacles were of inferior standard and the defenders were further hampered by division of forces. Only the dogged tenacity of their commander held the town against attack after attack, and, when the waters of the canals were used to inundate the surrounding country, the besieging force withdrew, with Ronarc'h and his raw forces the heroes of France.

THE BRITISH MARINES IN THE WAR

THE JUTLAND BATTLE

Despatch from Commander-in-Chief, Grand Fleet, dated 23d August, 1916, and 15th July, 1916:

I have the honour to bring to the notice of the Lords Commissioners of the Admiralty the names of the following officers who are recommended for honors and special commendation:

.

Remarks of Vice-Admiral Sir Doveton Sturdee.

.

Lieut.-Col. Charles Edwin Collard, R. M. L. I.

Very materially assisted in controlling the gun-fire of H. M. S. *Benbow* from an exposed position. This officer has seen much war service previously in East and South Africa.

.

Remarks of Vice-Admiral Sir David Beatty.

.

Capt. Edward Bamford, R. M. L. I.

In after control when it was blown to pieces by a shell-burst. Slightly burnt in face and slightly wounded in leg. Then assisted to work one gun with a much reduced crew, and controlled another gun. Assisted in extinguishing a fire, and in general showed great coolness, power of command, judgment and courage when exposed to a very heavy fire.

Maj. Francis John William Harvey, R. M. L. I.

Recommended for posthumous Victoria Cross. Whilst mortally wounded, and almost the only survivor after the explosion of an enemy shell in "Q" gun-house, with great presence of mind and devotion to duty ordered the magazine to be flooded, thereby saving the ship. He died shortly afterwards.

The King has been graciously pleased to approve of the grant of the Victoria Cross to the undermentioned officer in recognition

of his bravery and devotion to duty as described in the foregoing despatch:

Maj. Francis John William Harvey, R. M. L. I. (killed in action).

WITH AIRCRAFT IN DARDANELLES

The following were the Marine officers attached to the R. N. A. S. in the recent Dardanelles operations: Wing Commander Gerrard, Squadron Commanders Fawcett and Kilner, D. S. O.; Flight Commanders Collet and Robinson, Temporary Second Lieut. B. Jones, and Lieutenant Warner. Of these, Collet was attached to No. 3 Wing, the remainder being in No. 2 until Fawcett took over command of No. 3. Collet went out with the first lot of machines to the Dardanelles. He was a fine pilot and a very good observer, and did excellent work, taking a tremendous interest in all the operations. His death was a piece of very bad luck. When the aeroplanes moved from Tenedos to Imbros they first employed a rather bad ground to the east of Kephalos Harbor. This aerodrome was small, and had a 200-foot drop on the north and west sides of it. One afternoon in August, 1915, news was received that a machine was down on the Salt Lake, Sulva. Collet was directed to take a mechanic over to try to save. A north wind was blowing, fairly fresh, and he had to get off towards one of the cliffs. Soon after leaving the ground, and at about 150 feet, his engine gave out. Hence he had the choice of either landing in the sea or making a 32-point turn and landed head to wind in the aerodrome (he could not have stopped the machine in the restricted available space if he had landed tail to wind). He chose the latter alternative, and attempted a very steeply-banked turn to do this. His machine side-slipped and nose-dived, and on hitting the ground caught fire. The mechanic was injured, but managed to crawl out. Poor Collet was not so fortunate. Some men of the 3d Wing who were there made a very gallant effort to extricate him, in spite of the intense heat of the burning petrol. They did succeed in getting him clear, very badly burned. Nevertheless he died shortly afterwards.

In the middle of August Fawcett arrived out with the advance

party of No. 2 Wing. They had to make an aerodrome by Windmill Hill, Kephalos, which, in spite of some very gloomy prophecies as to what would happen in the wet weather, was quite successful. Some six weeks after their arrival they were joined by Gerrard with the remainder of No. 2 Wing. At the beginning of December the Admiral expressed a wish that the submarine net at Nagara should come in for some hate. Consequently, early one morning eight machines were sent out to drop specially-constructed bombs on it. Robinson was piloting one of these, and Fawcett was to fly another, with Jones as passenger, to keep off any enemy machine that might be curious, and also to take note on the effect produced. The clouds were very low, about 1,000 feet, so pilots were to keep above them and fly by compass and watch. Robinson never returned, and his fate is not known for certain.

From Turkish reports we gathered that it was something like this: Having flown until he thought he was just north of the net, he dived through the clouds; but he must have been about three miles too far to the northwest and came into view about 800 feet over Ak Bashi Liman. He was shot down, and believed to have been burnt with his machine. His loss was very keenly felt, as he was a very good pilot and tremendously keen.

Fawcett and his passenger had a rather inglorious flight. Almost immediately after leaving the aerodrome their engine completely failed, and they were forced to land in the Salt Lake, Imbros. It was quite shallow, but had a lot of soft mud on the bottom. As the machine was very heavily loaded, it landed fairly fast and turned a somersault, completely wrecking itself. Neither was hurt.

Fawcett brought No. 3 Wing home in February, and Gerrard returned for repairs in April, 1916, having had a very nasty crash. He was testing a machine before taking part in the raid on Constantinople. When quite low, his rudder controls jammed and the machine stalled and nose-dived. He, very fortunately, was not killed, but was injured about the face and ribs.

Jones is still somewhere in the Eastern Mediterranean, continuing his very excellent work.

Squadron Commander Kilner, D. S. O., was the senior flying officer in H. M. S. *Ark Royal*. During the summer he formed a seaplane base on the southern shore of Imbros. At the beginning much useful work was done from this station in the way of reconnaissances and photography. Spotting for the artillery was

also carried out at first by seaplanes. This base was given up when the *Ark Royal* was required in another sphere of action.

Lieutenant Warner was armament officer to No. 3 Wing, and his long experience as a gunnery instructor was of the greatest value. He afterwards took the duties of first lieutenant, in addition. He returned home with 3d Wing, and has since served his connection with the R. N. A. S.—*Globe and Laurel*.

EXPERIENCES WITH THE ROYAL MARINE BRIGADE AND ROYAL NAVAL DIVISION IN FLANDERS AND THE DARDANELLES

Immediately on the outbreak of the present war a Special Service Bridge was formed, consisting of a battalion from each division of the Royal Marines.

Training was commenced, and all were equipped for immediate service. After a trip to Eastney, where an assembly of the whole Brigade was made, the battalions returned to their respective divisions, viz.: Chatham, Portsmouth and Plymouth.

On August 26, 1914, however, a start was made, and after a very quick movement of "packing up kit," etc., in the middle of the night, we found ourselves on board of some of H. M. ships, en route for an unknown destination, afterwards discovered to be Ostend, where we disembarked and started performing a good amount of "navvying." Trenches were dug and an outpost line was pushed out to guard Ostend on the line Mariakerke-Brughes Railway to the sea coast.

A squadron of six aeroplanes and the airship *Astra Torres* were attached to the brigade, but very little of them was seen.

After four days' strenuous work, with very little chance of a nap, the Brigade reembarked for England, and the battalions were sent to their divisions.

Various little items, such as "mustering kit," "reequipping," "drawing identity discs," etc., were now performed, and things began to settle down.

During the second week in September, 1914, the battalions proceeded to St. Margaret's Bay, near Dover, and formed a camp there.

Recruits from the Depot, R. M., Deal, were drafted into the battalions to complete their training, and the Deal Battalion was now formed.

On Saturday, the 19th September, 1914, in the early hours of the morning, everything was packed up, and at 8.30 a. m. all were on the march to Dover, where we were embarked on H. M. transports *Lake Michigan* and *City of Edinburgh*.

Accommodation was as follows: We were packed like sardines, had horse-boxes to make ourselves as comfortable as possible, with straw in them which smelt very strongly of the last occupants, and plenty of rats, etc., for companions.

A very lively trip, which was made the more jovial by the unusual howls and growls at which a Marine is a "qualified" man. After a few showers of rain, we eventually arrived at Dunkirk, disembarked on Sunday morning and went into billets.

The French made us all very welcome, and that evening the general topic was the nature of the billet each had secured. A camp was formed just outside the town, and after four days in billets, the battalions once more went under canvas, where every day plenty of newly-made French friends came and visited us, usually bringing with them some small dainties which were not included in the then "war ration" of bully beef, biscuits and jam.

The "petit" boys and girls seemed to have a great liking for "ticklers"—jam and biscuits—and as the supply was plentiful, the youngsters usually went away very much satisfied.

At Dunkirk we were joined by a few Royal Engineers and about 400 Naval and Marine ratings, under the command of Commander Samson, D. S. O., R. N., with armed motor cars and six aeroplanes.

The latter had already established themselves at Morbecque, and had previously been employed in clearing the district of Uhlan patrols, as far as Arras, Douai and Lille.

On the 28th September, 1914, the Portsmouth Battalion, under the command of Lieutenant-Colonel Luard, R. M. L. I., was sent to Lille to cover the retirement of the French troops at Douai, Tournai and Orchies, and to reinforce them if necessary.

On the 30th, the remaining battalions, with the exception of the recruits who joined the brigade at St. Margaret's Bay, proceeded to Cassel, which is situated on the top of a hill. Marching from the station in full "pack" up a hillside road which winds in and out for a distance of about a mile and a half was found somewhat fatiguing.

From the top of the hill a very good view of the surrounding country was obtained, and reconnoitering patrols were sent for.

The Chatham Battalion was billeted in the Casino, but the usual frequenters at a place of this description had already fled, and the place looked very desolate and bare.

On Saturday, 3d October, 1914, another week-end trip, this time in cattle trucks. Entraining at about 8.30 a. m., we proceeded to Antwerp via Dunkirk and Bruges. Machine guns were mounted ready for action in certain trucks, in case of any unwelcome attacks. The whole journey was very interesting, and it was thrilling to see how the French and Belgians welcomed us everywhere we stopped, and all kinds of fruit, small mementoes, and, in some cases, beer were offered us.

Arriving outside Antwerp about 11 p. m., we detrained at a station called Vieux Dieux, about six or seven miles south of the city of Antwerp. Here the dull roar of the guns in the distance could be heard, and the explosion around the trenches occupied by the Belgians at Lierre could be plainly seen. Villages were burning furiously, and the sky was lit up for miles around.

The Marine Brigade proceeded along the Lierre route, and early in the morning of the 4th October, 1914, relieved the much-exhausted 21st Belgian Regiment in the trenches north of the River Nethe, on a line running from Lisp across the railway to the Lierre Route, one mile south of Pullaar. The Lierre Bridge across the River Nethe was destroyed. The trenches, if they could be called such, were very wide indeed, and afforded us no cover whatever from the shrapnel and high explosive shells, of which the enemy gave us an abundant supply.

During the forenoon we sustained a few casualties, including Major Pryce-Browne, and our time was fully occupied in making some sort of protective cover.

Fort Kessell was destroyed and abandoned by the Belgians during the afternoon. The night passed with the usual "strafing" of our lines by the enemy, who, early the next morning, succeeded in crossing the River Nethe, and forced the 7th Belgian Infantry Regiment to evacuate their trenches near Lacheren. A counter-attack by the 2d Chasseurs and the remains of the 7th Belgian Infantry Regiment, gallantly led by Colonel Tierchon, of the former regiment, drove the Germans back across the river and restored the position at 4.30 p. m.

The evening passed with occasional sniping and the usual artillery fire, and during the night the 1st and 2d Naval Brigades

arrived from England and bivouacked in Antwerp, near Borsbeck and Fort No. 1.

At dawn, on the 6th, the Germans attacked the Belgians on our right with great force, and succeeded in driving the latter from their positions in the vicinity of Boomlaar and de Holst. The Belgians counter-attacked at 8 a. m., and succeeded in recovering the trenches at Boomlaar, but failed to do so at De Holst, and the position at 9.50 a. m. was very serious. The 1st Naval Brigade was sent up to reinforce the Belgians, and drive the enemy back if possible, but before they reached the position our gallant Allies had been forced to retire to a prepared line west of Donk. The Royal Marine Brigade, now without support on the right flank, was withdrawn, and, after retiring about a mile and a half, orders were given to "dig in." Owing to the shortage of entrenching tools—picks and shovels—the work was slow; also the rain of the previous night had made the ground very heavy. However, all put their spirit into the work, and, with the aid of the hands, which were used as shovels, some sort of cover was soon prepared.

As regards meals and sleep, one had to work and eat at the same time, and our meals consisted of biscuits and bully beef. Sleep was hard to obtain, as we had our time fully occupied otherwise.

As soon as it was dark, the whole line was ordered to withdraw inside the second line of forts around Antwerp, and during the night this was successfully carried out.

The enemy concentrated his heavy artillery on the town, and great havoc was caused amongst the civilian population. Fires sprung up in many places, including the great American Oil Company's tanks of petroleum, just south of the railway terminus.

The forts were systematically demolished by the enemy, and the Belgian Army was now in full retreat. The Naval and Marine battalions hung to their positions during the 8th October, but with the Belgians retiring, and the continuous stream of shells from the enemy's guns, the position was far from pleasant.

Our force consisted only of infantry, and a few guns would have been very welcome, and could have been easily handled by the majority of the "Royals" who were present.

At about 7.30 p. m. orders were given for a general retirement of the brigades by certain routes through Antwerp, across the River Scheldt to a place called Zwyndrecht, where the headquarters had established themselves.

The garrison of Antwerp had made all preparations to keep the roads open, and had also prepared mines to blow up the roads after our troops had passed, so as to delay the enemy as much as possible.

The 2d Naval and Marine Brigades carried out the retirement successfully, and arrived at Zwyndrecht in the early hours of the morning. After a short rest, they proceeded to St. Gillies Waes, where they entrained for Ostend soon after daybreak on the 9th.

The 1st Naval Brigade, with the majority of the Portsmouth Battalion, were somehow delayed for about three hours, and also lost their way, eventually arriving at St. Gillies Waes just in time to catch the last refugee train, which was already partially filled with women and children.

Great difficulty was experienced in finding enough accommodation for the troops, and the different units became very much scattered. The train started on its journey, and everything went well until it neared St. Nicholas, where it was stopped. On inquiries being made, it appeared that the engine driver and stoker had disappeared. However, a leading stoker and an A. B. of one of the Naval Battalions, who had evidently had some experience of engine driving, restarted the train, and after driving for about ten minutes pulled up at a side-track terminus. Rifle fire broke out from all directions, and it was soon apparent that the Germans had neatly ambushed the train. The scene that followed is difficult to describe. Women and children screaming with terror, and clinging to anybody for protection, made it nearly impossible for any discipline, and a general mêlée ensued. The Portsmouth detachment, who had kept as close together as possible when entraining, were collected, and took up a position along the railway track. Being dark, it was impossible to see the enemy themselves, but the flashes of their rifles gave one some idea of their position, and fire was very quickly returned.

The 1st Naval Brigade, after some difficulty, was got on the move, and commenced a very rapid retirement along the railway track, whilst the Portsmouth detachment carried out a series of rear-guard actions.—*Globe and Laurel.*

NOTICE OF ELECTION

The term of office of the present Board of Control expires on June 30, 1917. As the Major General Commandant of the Corps is *ex-officio* the Senior Member of the Board of Control, the Active Members of The Marine Corps Association are requested to vote for the two members who shall take office on July 1, 1917. The ballot for this purpose, which is printed below, should be cut out and mailed to the Secretary-Treasurer, The Marine Corps Association, 24 East Twenty-third Street, New York, N. Y. Any active member of the Association is eligible to election.

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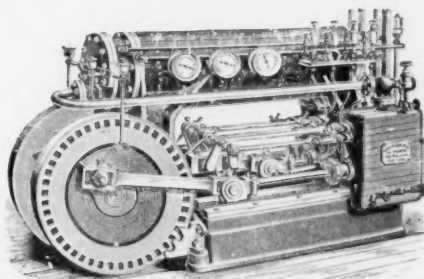
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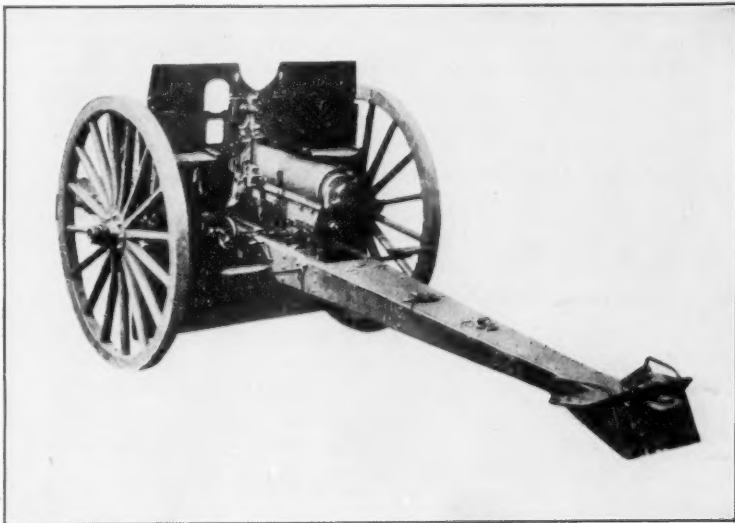
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With the January, 1917, issue two important changes were made in the *International Military Digest*. As originally planned, the *Digest* was primarily a reference periodical. We have found, however, that a very large proportion of its subscribers read it through monthly from cover to cover; and a number have suggested, especially subscribers in active service in the field where lighting facilities are not always of the best, that a slightly larger type face would be welcomed.

The January *Digest* comes out with a size larger type and a correspondingly larger page. To meet the increased cost of this change, and especially to add additional material which has heretofore been crowded out, the Quarterly Cumulations of the *Digest* will be discontinued. The important saving affected in this way will, it is expected, permit an enlargement of about 30 per cent in the size of the monthly issues.

The material of these monthly issues will be cumulated into one alphabet in a bound annual volume as heretofore, the intermediate quarterly cumulations only being discontinued.

The price of the bound annual volume by itself is \$4. The enlarged *International Military Digest* (monthly issues only) will be \$3.50 a year instead of \$3. Subscriptions to the complete *Digest*, monthly issues and bound annual cumulation volume together, will be \$5 a year as heretofore.

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quarterly at New York, N. Y., for October
1, 1916.

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STATE OF NEW YORK, }

Before me, a Notary Public in and for the
state and county aforesaid, personally appeared
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according to law, deposes and says that he is
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4. That the two paragraphs next above,
giving the names of the owners, stockholders,
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the list of stockholders and security holders
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security holder appears upon the books of the
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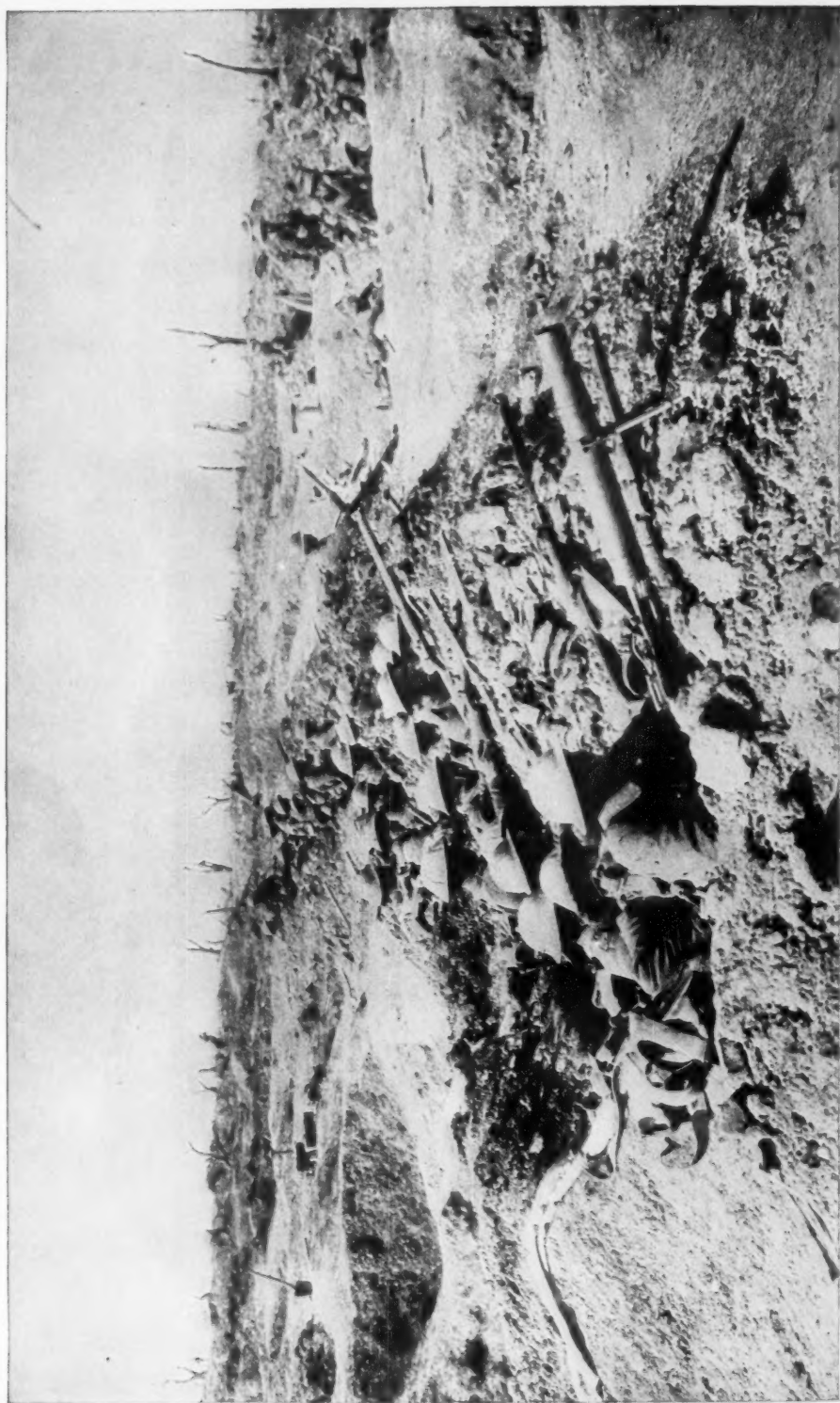
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